

AC 4668

Health Report

FOR

The City of Perth

For 1928

BY THE


Medical Officer of Health



PERTH:

PRINTED BY D. LESLIE, 20 ST. JOHN STREET.

1929.



Digitized by the Internet Archive
in 2016 with funding from
Wellcome Library

<https://archive.org/details/b28655874>

Health Report

FOR

The City of Perth

For 1928

BY THE

Medical Officer of Health



PERTH:

PRINTED BY D. LESLIE, 20 ST. JOHN STREET.

1929.

*To the Honourable the Lord Provost, Magistrates and Members
of the Town Council of the City and Royal Burgh of Perth.*

Gentlemen,

*I have the honour to submit my Thirtieth Annual
Report upon the Health of the City for the year 1928.*

*As in previous years, in order to make the Report more
interesting, I have incorporated several Charts and Tables,
which have been drawn up with every care and accuracy.*

*The mortality rate for the year is 14·8 per 1000—a figure
slightly above the previous year, when it was 13·6, but a figure
well below the average of the last decade, and when one
considers that the old age mortality (i.e., deaths at 65 years
and upwards) accounts for 45 per cent. one has a fairly just
reason for gratification. The infantile death-rate—84 per 1000
births—is somewhat higher than the record of 1926, but a rate
which would be the envy of many towns.*

*As regards the mortality from Zymotic Causes, it is pleasing
to record the record figure of ·71 per 1000, Diphtheria falling
from ·20 to ·05, Scarlet Fever from ·08 to ·02, and Whooping-
Cough from ·20 to ·02.*

*One more satisfactory feature may be reported. The
consumptive death-rate continues low—·65 per 1000—a figure
about a third of what it was twenty-five years ago. On the
other hand Cancer is decidedly on the increase, and the figure
of 1·51 per 1000 is the highest of which I have record.*

*It is worthy of record that for the past two years no case of
Typhoid Fever has been notified.*

*C. PARKER STEWART,
M.O.H.*

*Rockville, Barnhill,
Perth, April, 1929*

Health Report for 1928.

AREA AND POPULATION.

THE registration area, as given by the Registrar-General, is 3,134 acres, while I estimate the population at 33,667. This represents 10·7 persons to an acre. The additional acreage, due to the extension of the Burgh boundary in 1909, was 1,017 acres.

BIRTHS.

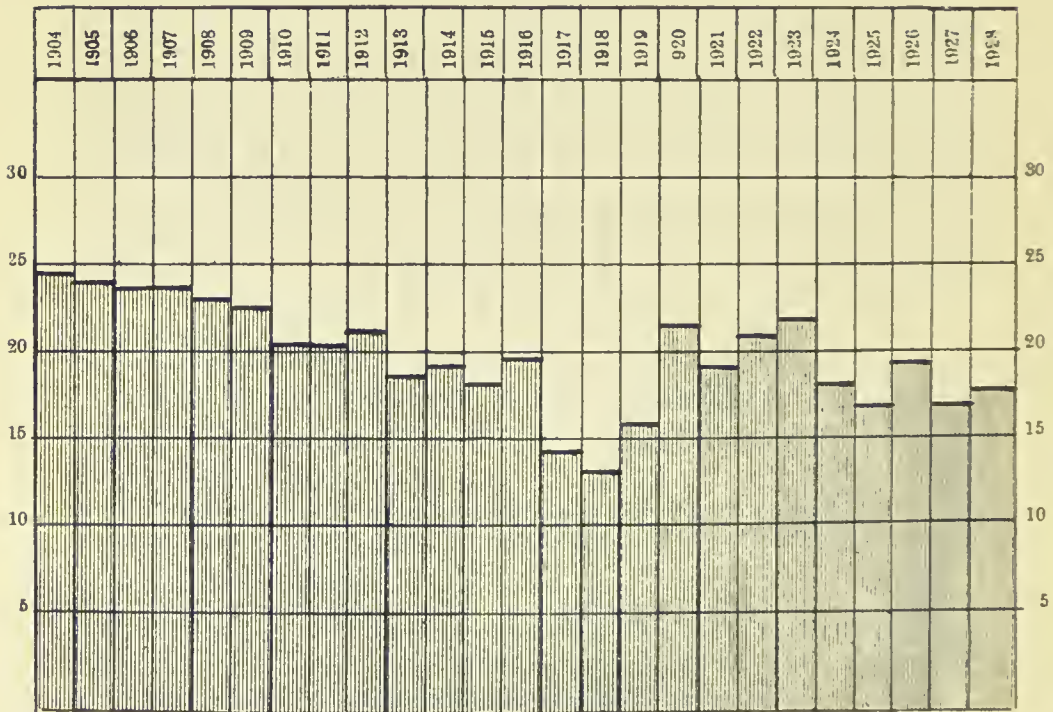
The Births registered in the Burgh during 1928 were 617. This represents a birth rate of 18·3 per 1000 living, as compared with 17 in the previous year. Of these 617 births 330 were males and 287 were females, while 39 were illegitimate. The proportion of illegitimate births to total births was 6 per cent., as compared with 8 per cent. in the previous year.

TABLE SHOWING THE NUMBER OF BIRTHS REGISTERED DURING EACH MONTH OF THE YEAR 1928.

MONTH.	Male.	Female.	Total.	Illegitimate.
January,	26	27	53	2
February,	30	16	46	2
March,	35	26	61	5
April,	34	40	74	4
May,	23	30	53	5
June,	34	23	57	8
July,	24	23	47	2
August,	22	14	36	1
September,	25	20	45	1
October,	27	26	53	4
November,	31	20	51	3
December,	19	22	41	2
Total, ..	330	287	617	39 or 6 %

An examination of the following Chart will show the steady decline which has taken place until the last few years. This declining birth-rate is a feature of all civilized races, and I stated in a previous Annual Report that I feared the upward tendency of the last year or two was not one which may be expected to continue. This has shown itself to be the case this year.

CHART SHOWING THE BIRTH RATE PER 1000 IN THE CITY
DURING THE PAST 25 YEARS.



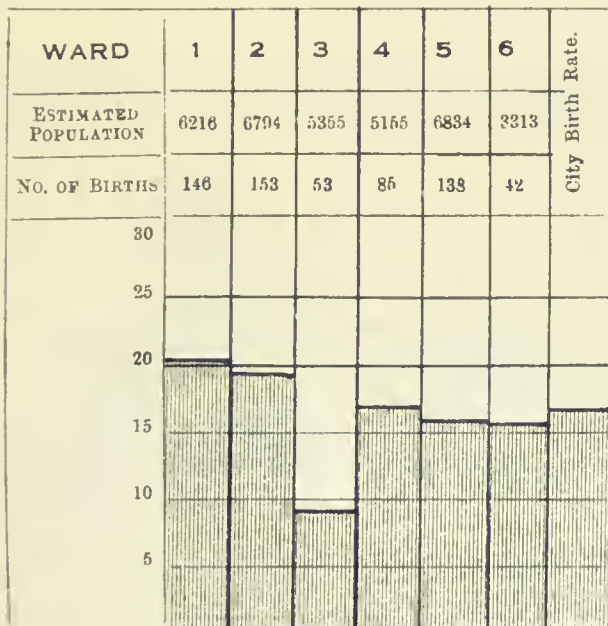
It will be noted from the foregoing chart how steadily the birth rate declined until 1919—in fact in 1899 the birth-rate was 28.1 per 1000 as compared with 12.8 per 1000 in 1918, a decline during a period of 20 years of 50 per cent. From 1919 to 1923 the birth-rate increased, but since the latter date the tendency has been downwards.

While the birth-rate for the whole of the City is 18·3 per 1000, it may be noted that in three Wards—viz., Wards 1, 3 and 5—this birth-rate is exceeded, while in the remaining Wards the birth-rate is below that of the City generally. In 1927 the City rate was exceeded in Wards 1 and 2.

Ward 1 has the highest birth-rate of 23·4 per 1000; Ward 2 has a birth rate of 22·5 per 1000; Ward 3 has the lowest birth rate of 9·9; Ward 4 has a birth-rate of 15·9; Ward 5 has a birth-rate of 20·1, and Ward 6 has a birth-rate of 12·6 per 1000.

In 1927, Ward 1 had the highest birth-rate while again Ward 3 has the lowest, the figures then being 20·4 and 9·2 respectively.

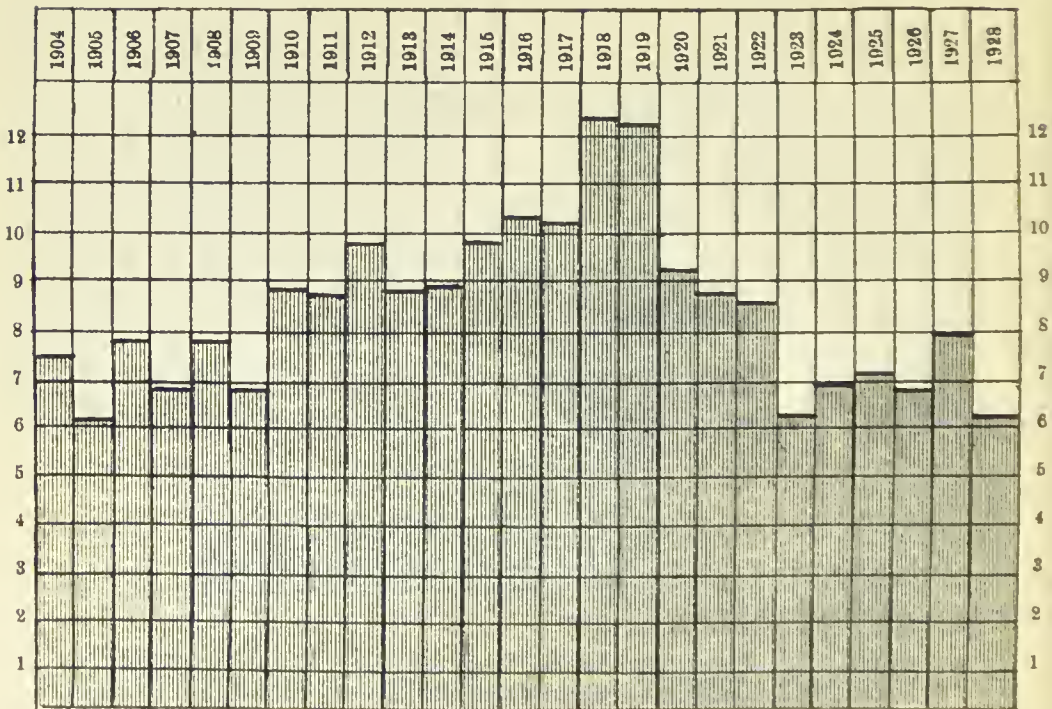
CHART SHOWING THE WARD BIRTH RATE PER 1000 OF POPULATION.



Connected with the birth-rate is the question of illegitimacy, and in looking back past years it may be noted that from 1899 to 1902 a gradual decline from 6·8 per cent. to 5 per cent. took place.

From the accompanying chart it will be seen that from the latter year there tended to be a steady increase until it reached a record of slightly over 12 per cent. in 1918. In the year following the rate was very slightly lower, but in the succeeding years there was a considerable decline. During recent years the tendency has been the other way, and this year's figure stands at 6 per cent., as compared 8 per cent. in 1927, a figure considerably higher than one desires, but a great improvement over the period of 1910-1922 and the previous year. It is at the same time only right to state that this unsatisfactory phase in relation to births is more than a local circumstance. Associated with illegitimacy, unfortunately, is an increased infantile mortality. This is especially so during the first month of life, and is largely due to the fact that, in addition to the causes of death common to all infants, the mother of the illegitimate child is often under circumstances where she cannot do justice to her child and, it may be, even indifferent to its welfare.

CHART SHOWING PERCENTAGE OF ILLEGITIMATE BIRTHS
DURING THE PAST 25 YEARS.



DEATHS.

The deaths registered in the Burgh during the year numbered 664, of which 182 were classed by our Registrar as rural, *i.e.*, persons dying within, but not belonging to the Burgh. There was one landward death.

TABLE SHOWING THE NUMBER OF CITY MALE AND FEMALE DEATHS DURING EACH MONTH OF THE YEAR.

(Not including deaths of citizens without the Burgh.)

MONTH.				Male.	Female.	Total.
January,	...	...	...	28	22	50
February,	...	...	...	15	22	37
March,	...	...	...	22	22	44
April,	...	...	...	18	24	42
May,	...	...	...	21	27	48
June,	...	...	...	28	21	49
July,	...	...	...	19	19	38
August,	...	...	...	9	15	24
September,	...	...	...	16	21	37
October,	...	...	...	17	15	32
November,	...	...	...	17	19	36
December,	...	...	...	20	25	45
Total of City,				230	252	482
Rural,				90	92	182
Total,				320	344	664

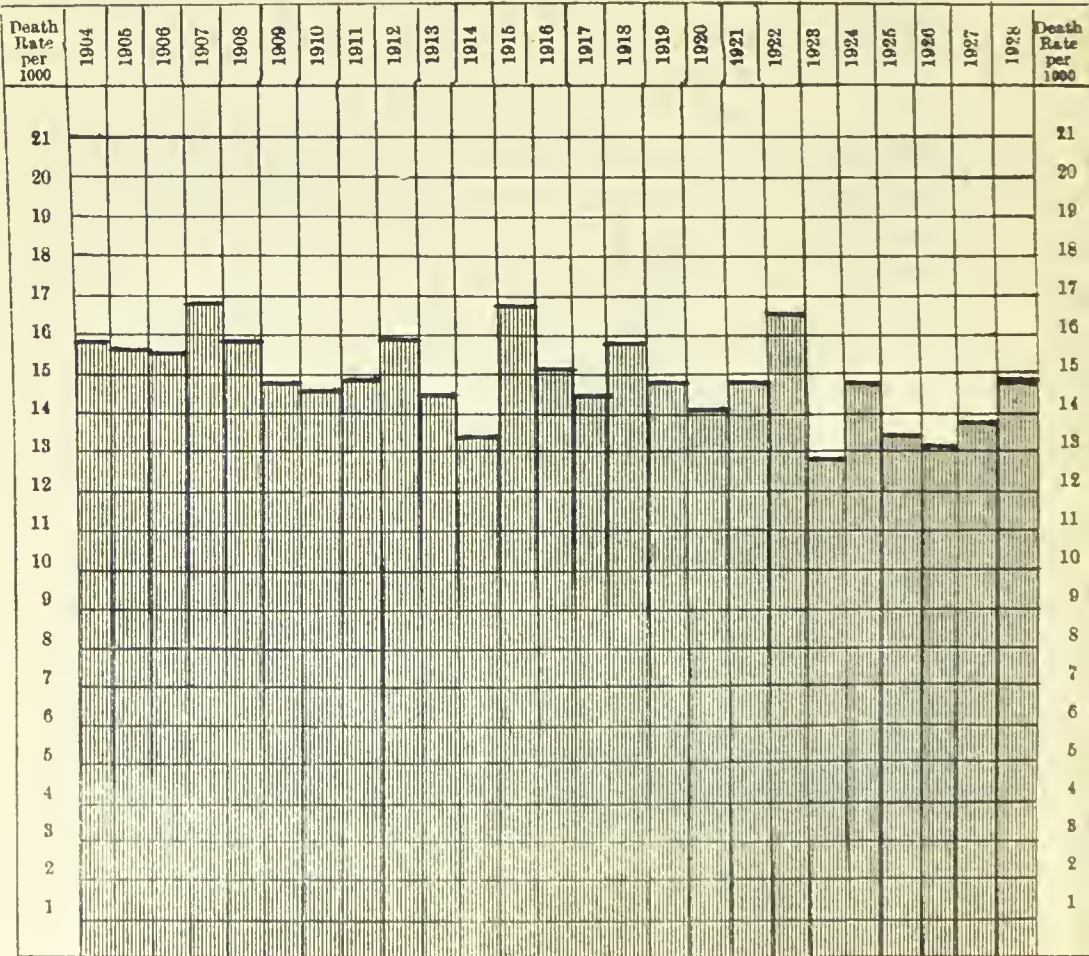
After taking into account the deaths of citizens outside the Burgh boundaries, 18 in number, the annual mortality rate for the year is 14·8 per 1000, as compared with 13·6 in 1927.

If we compare this year's death-rate with the death-rates of only 20 years back one cannot fail to find satisfaction in the present existing state of matters. Then, 18 to 20 per 1000 and even over

was the rule rather than the exception. In the preface to my annual reports of 1903 and 1906 I stated that these reports were not only the most satisfactory which it had been my province to submit, but, to the best of my knowledge, the most satisfactory which had ever been presented to the Local Authority—the annual mortality for the City being at the exceedingly low rate of 15·5 per 1000.

Again, in 1914, I was able to record that the death rate was only between 13 and 14 per 1000; while in 1923 the mortality rate was the lowest ever recorded in the annals of the City, viz., 12·7 per 1000. This year's rate is 14·8 per 1000, not a record, but a rate considerably lower than the average of the last 20 years, and shows that Perth has kept abreast of the times in things pertaining to the welfare of its inhabitants, more particularly when note is taken of the age periods of death.

CHART SHOWING THE DEATH RATE FOR THE PAST 25 YEARS.



One pleasing feature, which will be referred to again in more detail, is the fact that a large number of deaths occurred in old people, and it is gratifying to record that just on 45 per cent. of the total deaths occurred in persons over 65 years of age, being the same as in the previous year.

Looking at the monthly death rates, we find that the highest death rate was recorded in the month of June, when it reached 17·7 per 1000. The next highest monthly return was in January, when it stood at 17·6, followed by May with 16·9 and December with 15·7. It will thus be seen that on no occasion did the monthly mortality reach as high as 20 per 1000, a rather unusual circumstance.

During June the most noticeable feature was the number of deaths among elderly people from diseases of the nervous system, and the extraordinary number of deaths from a "violent" cause. Deaths of infants were also above the average. In January, which had the second highest monthly mortality of 17·6 per 1000, infantile deaths, reached the highest point in the year; but the most important features were the large number of deaths attributed to circulatory and respiratory diseases, no less than 24 or just on 48 per cent. of the total deaths of this month being due to these causes. In this month 44 per cent. of the total deaths were over 65 years of age.

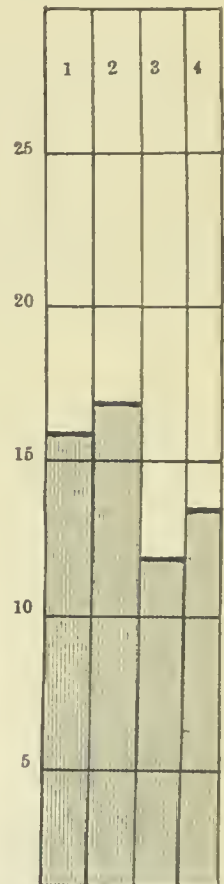
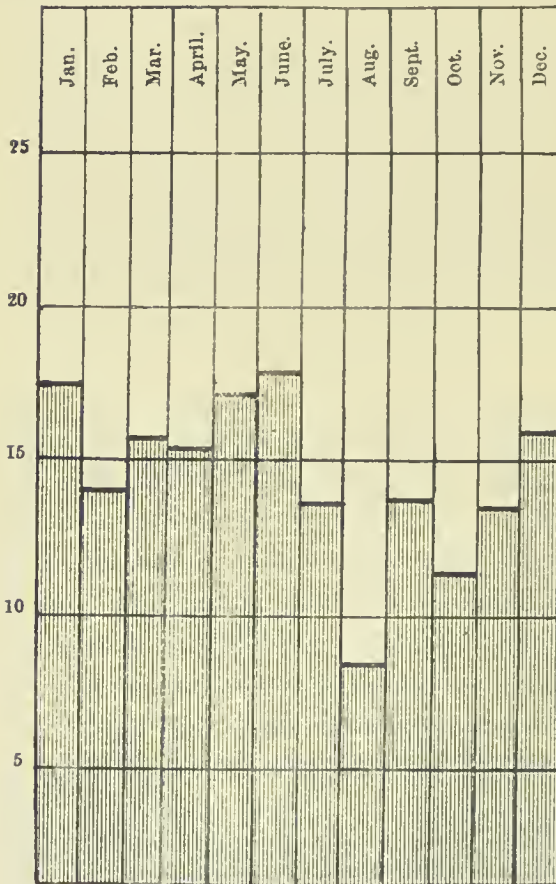
The lowest monthly rate occurred in August, and was 8·4 per 1000. As a rule the lowest monthly mortality has taken place in either July or September. During the month of August the most noticeable feature was the marked fall in deaths from diseases of the circulatory system, these having fallen from 8 to 3. The next two months with the lowest mortality were October and November with 11·2 per 1000 and 13·1 per 1000 respectively.

In the following months the death rate was above the annual rate, viz.:—January, March, April, May, June, and December, while in the remaining 6 months it was below.

CHART SHOWING THE MONTHLY AND QUARTERLY DEATH RATES
PER 1000 OF POPULATION FOR THE YEAR 1928.

Monthly Death Rate.

Quarterly Death Rate.



Annual Mortality Rate = 14.8 per 1000.

Looking at the quarterly death returns, which were, 1st quarter 16.6 per 1000, 2nd quarter 13.2, 3rd quarter 10.2 and 4th quarter 13.2, it may be noted that the first two quarters were above, and the last two quarters below the annual average. Compared with the previous year the quarterly death return is higher in the second, third, and fourth quarters but lower in the first quarter.

WARD DEATHS.

TABLE SHOWING THE WARD DISTRIBUTION OF DEATHS, INCLUDING DEATHS OF CITIZENS OUTWITH THE CITY, DURING 1928.

DISTRICT.	Males.	Females.	Total.
Ward 1,	32	43	75
Ward 2,	45	42	87
Ward 3,	42	44	86
Ward 4,	34	35	69
Ward 5,	54	60	114
Ward 6,	23	28	51
Total,	230	252	482

The figures given exhibit, however, no true relative mortality between the different Wards, because the population is different in each.

However, after careful consideration of the Census populations of 1911 and 1921 and the excess of births over deaths since the latter year, I have arrived at an estimate of the Ward population, which I believe will give a fairly true index.

	Est. Pop.	Death Rate.	1927.
Ward 1,	6216	12·2 per 1000.	16·7 per 1000.
Ward 2,	6794	13 ,,	14·8 ,,
Ward 3,	5355	16·4 ,,	12·2 ,,
Ward 4,	5155	13·9 ,,	10·6 ,,
Ward 5,	6834	17·5 ,,	13 ,,
Ward 6,	3313	16·6 ,,	12·9 ,,

As compared with 1927 it will be noted that there has been an increased mortality in all the Wards, excepting Wards 1 and 2, more particularly noticeable in Wards 5 and 6. The respective increases are as follows:—Ward 3, 4·2 per 1000; Ward 4, 3·3 per 1000; Ward 5, 4·5 per 1000; Ward 6, 3·7 per 1000; while Wards 1 and 2 show a decrease of 4·5 per 1000 and 1·8 per 1000 respectively. It will be noted that Ward 1 has the lowest death rate of the year. This is a very exceptional occurrence, although it occurred also in 1924. Last year the best Ward mortality occurred in Ward 4.

TABLE SHOWING THE MORTALITY AT THE DIFFERENT AGE PERIODS
IN THE VARIOUS WARDS FOR THE YEAR 1928.

AGE.	Ward I.	Ward II.	Ward III.	Ward IV.	Ward V.	Ward VI.	Total.
Under 1 year,	8	12	2	13	13	4	52
1—5 years (Infant period), ..	4	7	1	2	4	2	20
5—15 years (School period), ...	3	1	2	4	2	2	14
15—25 years (Adolescent period), ...	5	4	1	2	2	1	15
25—45 years (Mature period), ...	7	7	8	6	12	3	43
45—65 years (Late-mature period), ...	17	17	21	18	33	11	117
65 and upwards (Post-mature period),...	31	39	51	24	48	28	221
Total,	75	87	86	69	114	51	482

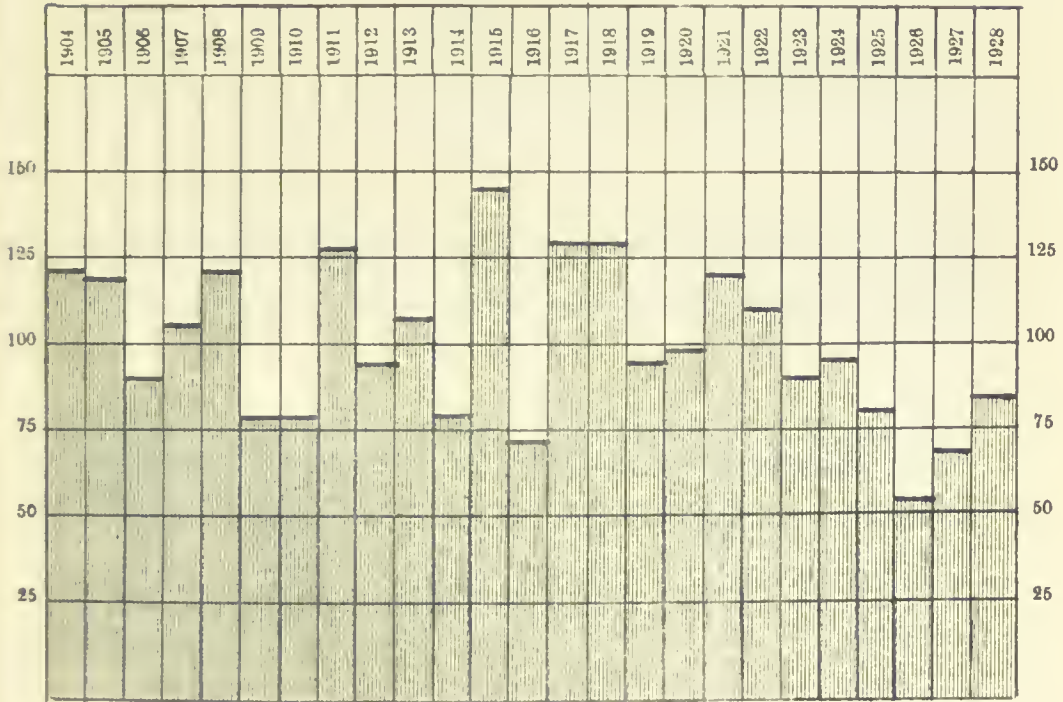
INFANTILE DEATHS.

The number of infants who died under one year was 52, so that the infantile death rate, or proportion of deaths of infants under one year to the registered births, is 84 per 1000 births, and is equal to 10 per cent. of the total deaths, as compared with 68 per 1000 births in 1927. Last year the number of infantile deaths was 39, or 8 per cent. of the total deaths.

In reviewing the deaths of infants for the past 25 years, as can

best perhaps be done by examining the following chart, it will be noted that on fourteen occasions the infantile death rate per 1000 births has been under the 100, the lowest recorded being 54 last year; on eight occasions between 100 and 125, and on four occasions between 125 and 150.

CHART SHOWING THE INFANTILE DEATH RATE PER 1000 BIRTHS
DURING THE PAST TWENTY-FIVE YEARS.



As has been done now for several years, a printed card with instruction on "The Care, Feeding, and Clothing for Infants" is given by the Registrar to the person registering the birth of a child where no medical man has been in attendance. This card, which is supplied with a hook, so as to be easily hung on the wall, is willingly given to anyone interested in the welfare of infants.

Having always considered this portion of the death returns as very important, I have in previous years given a detailed account of these infantile deaths, and the following table exhibits in a concise manner the causes and periods of infantile deaths belonging to the City.

INFANTILE MORTALITY FOR THE YEAR 1928.

Including deaths without, but belonging to, the Burgh.

CAUSES.	Under 1 day	2 days	3 days	4 days	5 days	6 days	7 days	Total under a week	Under 2 weeks	3 weeks	4 weeks	Total under 1 month	Under 2 months	3 months	4 months	5 months	6 months	7 months	8 months	9 months	10 months	11 months	Under 12 months	Total.
Premature Birth -	4	...	...	...	...	...	...	4	1	1	1	7	1	...	...	...	...	...	...	...	...	...	...	8
Congenital Malformations	1	2	1	...	1	...	...	5	2	...	...	7	1	...	...	...	...	...	...	...	...	...	...	8
Debility, Malnutrition -	1	...	...	...	1	...	1	1	3	1	3	1	...	1	...	...	...	...	...	...	9
Convulsions -	1	...	...	...	...	1	...	...	...	...	2
Diarrhea, Gastritis, Enteritis, &c. }	1	1	1	...	1	...	1	...	...	...	...	...	...	4
Whooping Cough -	1
Zymotic Diseases { Measles -	1	...	...	2
Diphtheria -
Septicemia -	1	...	...	...	...	...	...	1
Respiratory Diseases -	1	...	1	3	1	2	...	1	...	...	9
Tubercular Diseases -
Nervous Diseases -	1	...	...	...	...	...	1
Syphilis -
Overlain (Suffocation) -
Burns or Scalds -	2	...	...	...
Other Causes -	...	1	...	1	2	...	...	4	...	...	...	4	...	...	...	...	...	...	1	...	...	...	...	7
TOTAL	5	3	1	2	3	...	...	14	3	2	3	22	4	5	2	1	6	2	4	...	4	...	2	52

The total number of deaths on the *first* day was 5. This is 2 less than the number of last year. As a rule, of the deaths during the first week the majority occur on the first day, and this is borne out in the preceding table, although in 1926 the number was equalled by that of the third day.

The number of deaths within the *first* week was 14, being 3 more than that of last year at this period. This means that, of all the children who died under one year of age, nearly every fourth one died during the first week of infancy.

The cause of this percentage of deaths within the first week will be gathered from a consideration of the diseases which occasioned the deaths, many of the causes no doubt being attributed to maternal conditions.

During the *second* week there is a marked decline, eight deaths being recorded at this period. As a rule, each succeeding week during the first month shows a decline as compared with the week before, but this year the numbers have been practically the same.

The number of deaths within the **first** month was 22, showing an increase of 8 as compared with last year, and is equivalent to 40 per cent. of the total infantile deaths, a slightly higher percentage than in the previous year.

As a result largely of the great number of deaths during the first week, the deaths during the first month are greatly in excess of any succeeding month, being nearly four times the number of any succeeding month. In 1926 and 1927 this was also the case.

The large percentage of infantile deaths during the first month is easily explained by glancing at the *causes* of death, where it will be seen that Premature Births accounted for 31 per cent. of all deaths at this early period. This is below the percentage of last year. If to these cases there be added the cases which died as the result of congenital malformations at birth, we find that of the infants dying during the *first* month no less than 62 per cent. were attributable to one or other of these two causes. Of the remaining deaths at this period, three were attributed to debility, and five to other causes.

As regards the houses in which the infantile deaths occurred,

it may be mentioned that 5 took place in the High Street, 3 in Mill Street, Leonard Street, and Pomarium, 2 in Guard Vennel, Whitefriars Street, Mill Street, Canal Street, Barrack Street, Watergate, Cutlog Vennel, and St. Catherine's Road, and the remainder in different parts of the City. Not a single infantile death occurred in the Meal Vennel.

As regards occupations of Parents, the most prominent was that of labourers, followed by that of railway servants, mechanics, and firemen. There were no cases of a domestic servant as compared with two last year. In former reports one had to deal with a fair number of deaths of infants whose mothers were servants and whose infants had been farmed out.

Another point may be noted, viz., that the death rate among the illegitimate is, as might be expected, considerably higher than among the legitimate. The number of legitimate births during the year was 578. Of these, 47 died—a percentage of 8 per cent. The illegitimate births were 39, with a death roll of 5, being equivalent to 13 per cent. Such figures would indicate two things, either that the class of parents of illegitimate children is of a very low order from a health point of view, or what is much more likely—is that the illegitimate child does not receive the kindly consideration and care which a legitimate child gets. Notwithstanding it is only right to say that the figure of 13 per cent. is the lowest of which I have knowledge. How much this is due to the Child Welfare Centre it is difficult to say, but in any case the work done by the Health Visitors is most useful, and they have done much to counteract the evils so often arising from ignorance, carelessness, and indifference.

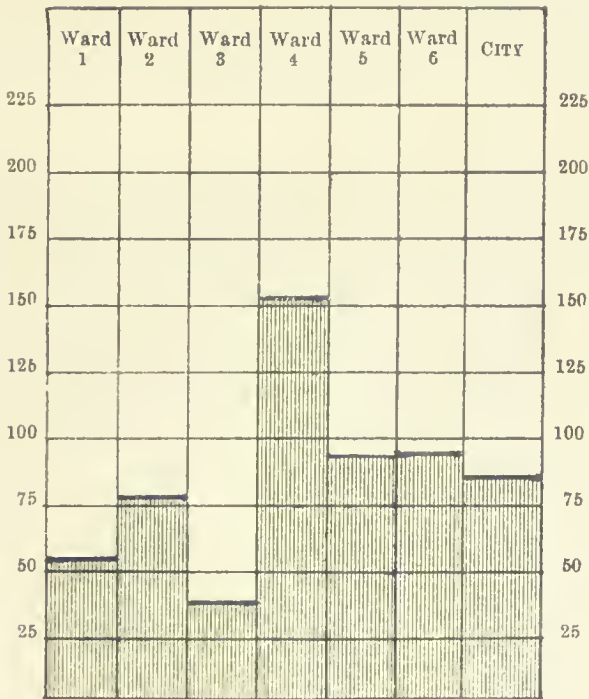
Parents have their duties to their children, so also has the State. It is not the duty of the State to take away a parent's responsibilities, but there are cases where, for the sake of the infant, the State must take action. We must be agreed as to the value of a child's life, not only from a State view, but from a natural and humanitarian point of view, and we must be determined to uphold it. It is to be borne in mind that the nation's greatest asset is its children, and if in the past it was the "cry" of the man and the woman, the present time is the "cry" of the child.

Considering these infantile deaths from a Ward point of view, and in relation to the births in each Ward, we find that

					1927.
Ward 1	has an infantile death rate of	54	per 1000 births	103	
" 2	"	"	78	"	53
" 3	"	"	37	"	80
" 4	"	"	153	"	57
" 5	"	"	94	"	79
" 6	"	"	95	"	—

the infantile death rate for the whole City being 84 per 1000 births.

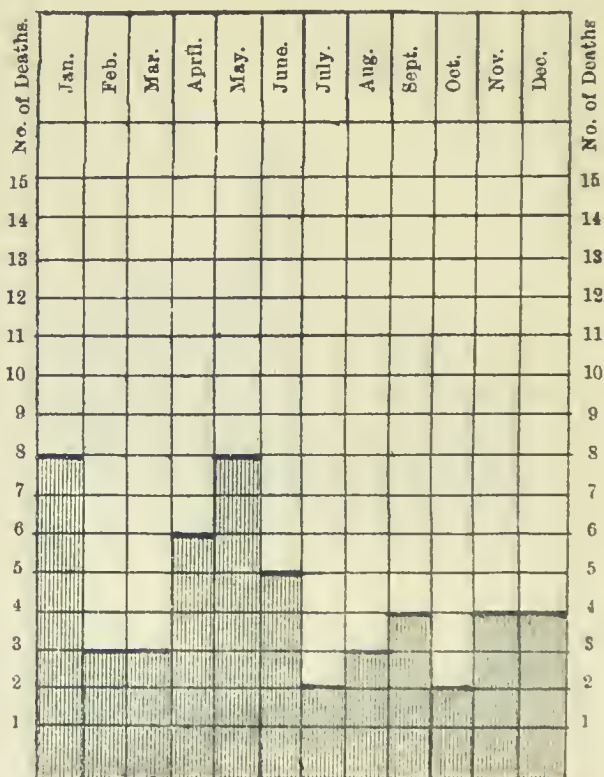
CHART SHOWING THE INFANTILE DEATH RATE PER 1000 BIRTHS
IN THE VARIOUS WARDS AND CITY.



The deaths in the Wards show considerable change as compared with the previous year. Thus Wards 1 and 3 show a considerable decline, while in the other Wards there was an increase. This was particularly the case in Wards 4 and 6. In the former the figure rose from 57 to 153 per 1000, and in the latter from 0 to 95 per 1000. It is particularly gratifying to record the great improvement which has occurred in Ward 1, the rate only being 54.

The following chart is interesting as showing how the infantile deaths vary throughout the year. In four months, viz., January, May, and June, the number was above the monthly average; while in the remaining months it was below. The greatest monthly number was in January and May, viz. 8, followed by April with 6. In the months of July and October only two deaths were recorded. It is rather remarkable that no less than 27 per cent. of the total infantile deaths should have occurred in the months of April, May, and June. The cause was the large number of premature births and congenital malformations at this period.

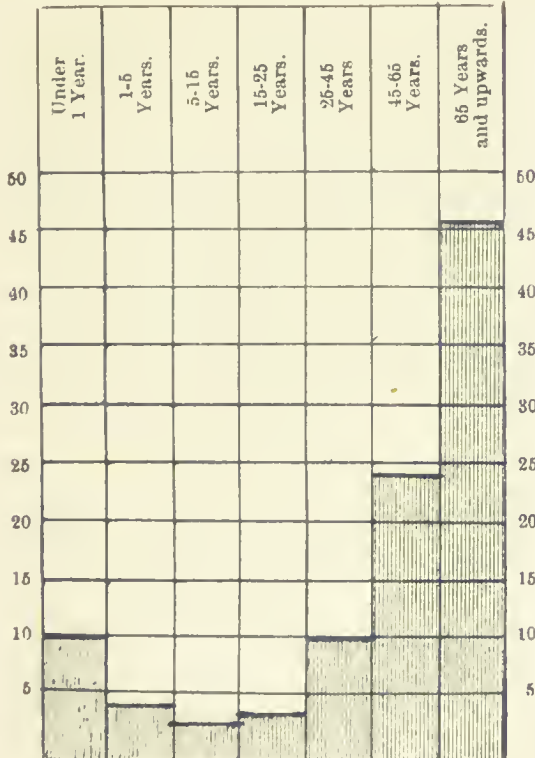
CHART SHOWING SEASONAL INFANTILE MORTALITY
DURING 1928.



OTHER AGE PERIODS.

The deaths of children between 1 and 5 years were 20, being equivalent to 4 per cent. of the total deaths; between 5 and 15 years (school period) 14 or 2·8 per cent.; between 15 and 25 years (adolescent period) 15 or 3·2 per cent.; between 25 and 45 years (early mature period) 43 or 10 per cent.; between 45 and 65 years (late mature period) 117 or 24 per cent.; and at 65 years and upwards (post mature period) 221 or 45·4 per cent. Compared with last year the percentage of deaths at the post-mature period has slightly increased, when it was 44·8 per cent. Of these post-mature deaths 44 were between 65 and 70 years, 110 between 70 and 80 years, 64 between 80 and 90 years, and 9 between 90 and 100 years, the oldest age recorded being 94 years.

CHART SHOWING THE MORTALITY AT THE DIFFERENT AGE PERIODS AS PERCENTAGE OF THE TOTAL DEATHS.



CAUSES OF DEATH.

(1.) ZYMOTIC DISEASES.

The number of deaths ascribed to zymotic causes, including those from septic causes—Septicæmia, Pyæmia, Puerperal Fever, and Erysipelas—and those from Diarrhœa, Gastritis, and Gastro-Enteritis, as well as those from Venereal disease, was 24, which is equivalent to a death rate of '71 per 1000 persons living.

TABLE SHOWING THE MORTALITY FROM PRINCIPAL ZYMOTIC DISEASES AT THE DIFFERENT AGE PERIODS.

DISEASE.	Under 1 Year.	1-5 Years.	5-15 Years.	15-25 Years.	25-45 Years.	45-65 Years.	65 and upwards.	Total.	Death Rate per 1000.	1927	
										Total.	Death Rate per 1000.
Erysipelas -	...	...	...	...	...	...	1	1	·029	1	·029
Diphtheria -	...	...	2	...	...	...	...	2	·059	7	·208
Scarlet Fever	...	1	...	...	...	...	...	1	·029	3	·089
Cerebro- Spinal Fever }	...	1	...	..	...	...	...	1	·029	..	...
Measles -	2	1	...	...	...	...	...	3	·089	2	·059
Whooping Cough }	1	...	...	...	...	...	...	1	·029	7	·208
Influenza -	...	...	...	...	...	2	1	3	·089	10	·298
Diarrhœa, in- cluding Gas- tritis and Enteritis }	4	...	1	...	...	...	2	7	·208	4	·110
Poliomyeli- tis Ant. Ac. }	...	...	...	...	...	...	...	...	..	...	·029
Epidemic Encephali- tis }	...	...	...	1	...	...	1	2	·059	3	·089
Puerperal Fever }	..	...	...	..	2	...	...	2	·059	2	·059
Septicæmia -	1	...	...	...	...	...	...	1	·029	1	·029
Total -	8	3	3	1	2	2	5	24	·71		
1927 -	6	10	6	...	6	4	8	40	1·19	40	1·19

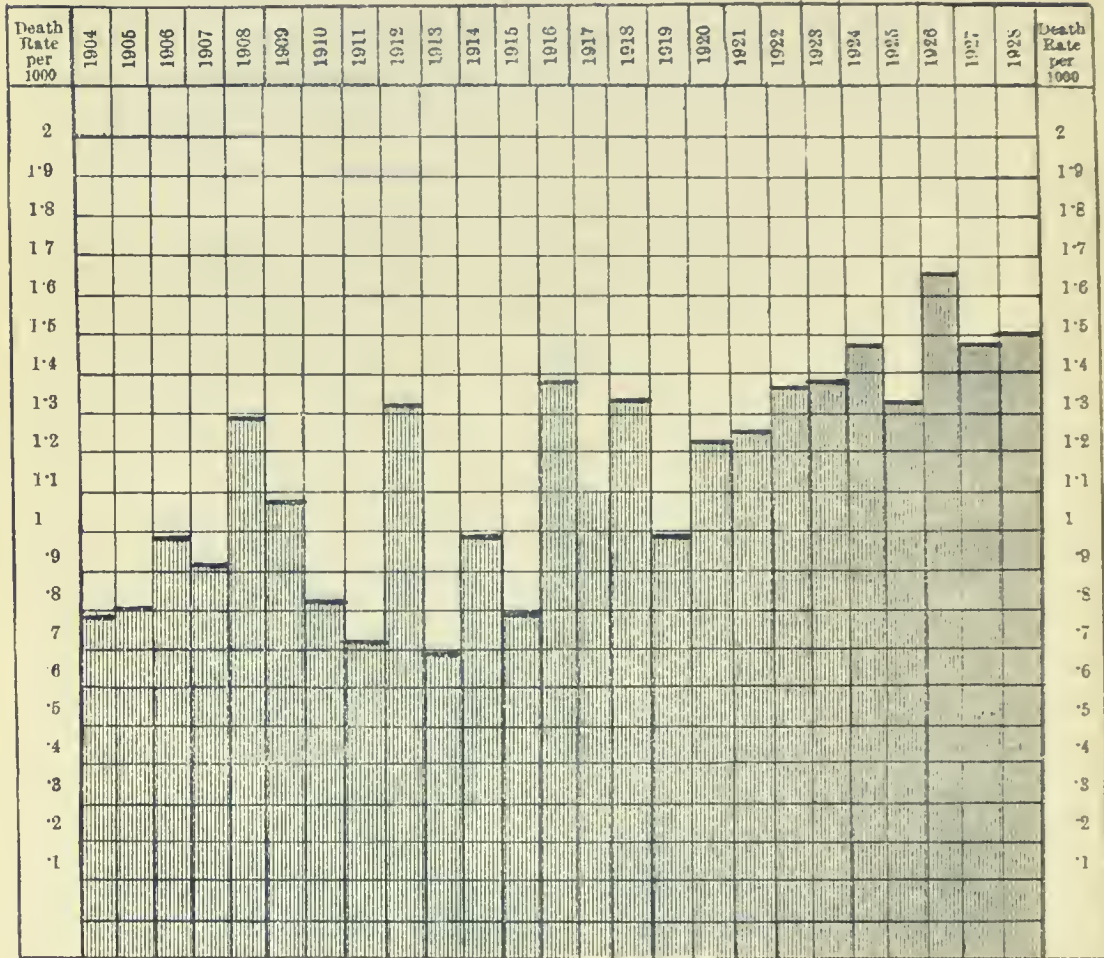
From the foregoing it will be seen that there has been a considerable decline in the zymotic death rate, having fallen from 1.19 of the previous year to .71. The main decreases have occurred in the following diseases—Diphtheria from .20 to .05, Scarlet Fever from .08 to .02, Whooping Cough from .20 to .02, and Influenza from .29 to .08. On the other hand Measles increased from .05 to .08, and Diarrhœa from .11 to .20. Erysipelas and Puerperal Fever remained the same, being .02 and .05 per 1000 persons respectively. Three deaths occurred from Influenza, mainly in elderly people, as compared with 10 in 1927. No death was attributed to Syphilis. That this is a true index of the prevalence of this disease I have grave doubt. In 1926 one death and in 1925 four deaths were attributed to this cause.

(2.) CONSTITUTIONAL DISEASES.

The deaths from this class of disease, including deaths outwith the Burgh, numbered 87, representing a proportion of 2.58 per 1000 living.

Cancer is the principal disease. In 1912 deaths from Cancer for the first time outnumbered those resulting from Consumption, and this year has been more than repeated, in fact the deaths number more than twice those of Phthisis. It appears evident from a study of mortality tables for past years that this disease tends to be on the increase, the deaths this year exceeding those of the previous year by 2. The deaths from Cancer numbered 51, and were equivalent to a death rate of 1.51 per 1000, as compared with 1.46 per 1000 in 1927.

CHART SHOWING THE DEATH RATE FROM CANCER OR MALIGNANT
DISEASE DURING THE PAST TWENTY-FIVE YEARS



Phthisis, or tuberculosis of the lungs, which used to be classed as a constitutional disease, has been a notifiable disease since 1912. During the year 22 deaths, including one from outwith the Burgh, occurred from this cause. Two occurred between 5 and 15 years, 3 between 15 and 25 years, 12 between 25 and 45 years, 4 between 45 and 65 years, and one above 65 years. This is 8 more than in the previous year, and based on the estimated population of 33,667, is equivalent to .653 per 1000, as compared with .417 in 1927.

The percentage of deaths to total deaths was 4·4, and the death rate as stated was equivalent to ·653 per 1000 persons living. Compared with the corresponding figures of 1900, viz., 9·2 percentage to total deaths and a death rate of 1·9 per 1000, it will be evident that, though the disease has shown an increase in the past two years, the factors which made this disease to be classed as the “white scourge,” are slowly but surely being got under control.

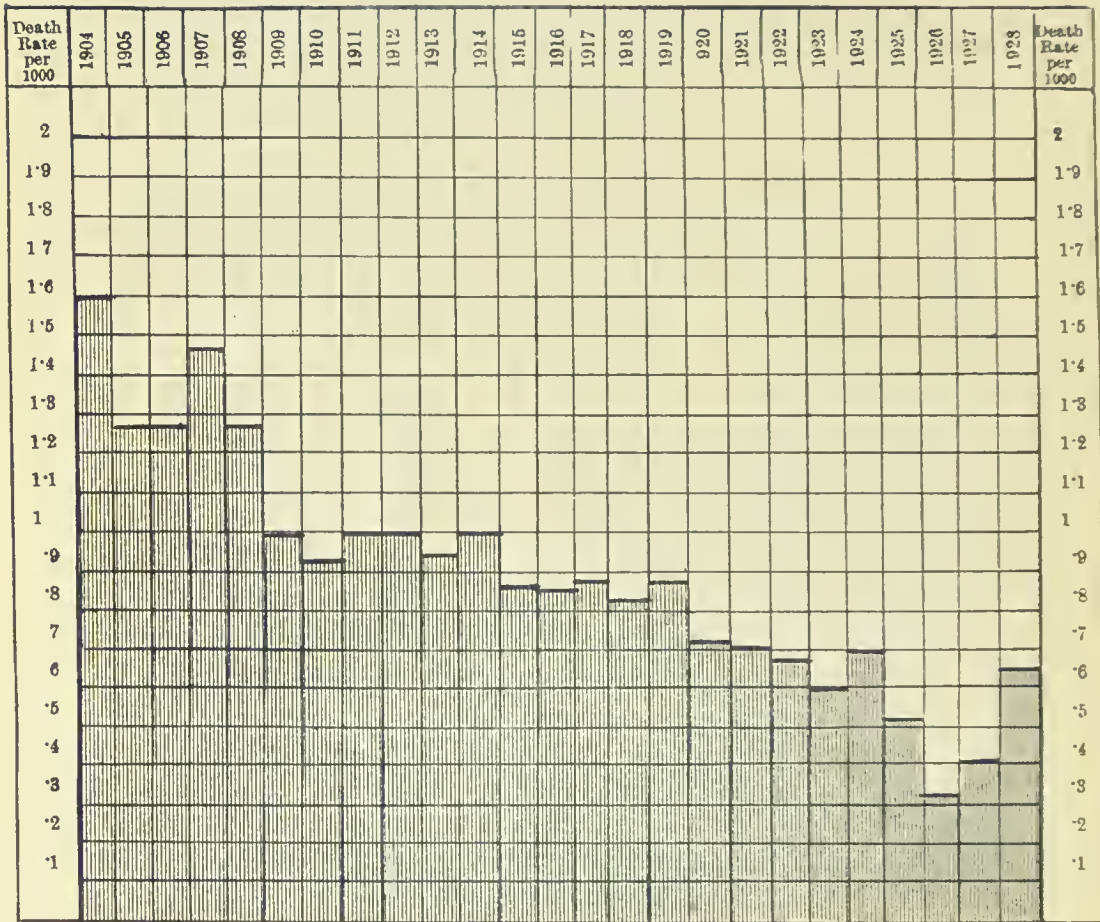
The Ward distribution of these deaths was as follows:—Ward 1, 6 deaths; Ward 2, 5 deaths; Ward 3, 5 deaths; Ward 4, 1 death; Ward 5, 3 deaths; Ward 6, 2 deaths. If we judge these figures by the respective population of each Ward, we find that—

					1927.
Ward 1	has a consumptive death rate of ·94 per 1000.				—
Ward 2	„	„	„	·73	„ ·74
Ward 3	„	„	„	·93	„ ·18
Ward 4	„	„	„	·19	„ —
Ward 5	„	„	„	·45	„ ·51
Ward 6	„	„	„	·63	„ 1·20

If all forms of tuberculosis are considered the figures for the Wards in their numerical order are ·94, ·73, ·93, ·38 ·90, and ·63 per 1000.

The death rate from this cause, though not a record for the City, is a great improvement on the figures of a few years ago, and a glance at the following chart will show how satisfactory has been the decline during the past years.

CHART SHOWING THE DEATH RATE FROM PHTHISIS DURING THE
PAST TWENTY-FIVE YEARS.



In 1920 an important administrative change occurred with regard to the treatment of insured persons suffering from tuberculosis. Formerly it fell to the Local Insurance Committee to provide treatment for phthisical patients, but in that year the duty was placed on the Local Authority. This implies the provision of institutional treatment or domiciliary treatment, and the payment of medicines incurred under the treatment of their own doctor at home. The Local Authority are now responsible for the care of all forms of tuberculosis.

I have treated at such length in previous reports on the subject of tuberculosis that there appears little more to add.

As to Sanatoria, further experience only strengthens my belief that so far as the working and poorer classes are concerned the value of these institutions as regards a cure is far from satisfactory, in fact it is rare if ever a cure in these classes is effected.

In the first place, it may be said that rarely in the case of the working man do you get him in the earliest stage of the disease. It was the hope—a hope which has not been realised—that under the Insurance Act his case would come under observation earlier, but a difficulty arises. He may be willing to undergo the cure. He is quite capable of work, feels little wrong, perhaps only a slight cough, but who is going to keep the family going while he undergoes Sanatorium treatment for several months. It would seem, in order to get the consent of such workers, with children dependent upon them, to undertake Sanatorium treatment, that a sum of money should be forthcoming for the upkeep of his household.

And there are reasons why a prolonged stay in a Sanatorium for the man with just enough to live on confers little benefit. True, during that time he has been no source of danger to the general public. He has been fed like a turkey cock, has thriven well, has learnt the value of fresh air, and takes his discharge feeling fit to do double the work he had previously to perform. He returns to his home and family. The weekly wage, after allowances for clothing, coal, rent, &c., are made is, with his appetite, insufficient for himself, let alone providing for the family. He cannot keep up the fare at the Sanatorium or anything like it, and if he has left the Sanatorium scarcely cured (as is almost certain to be the case) but fit to resume his work, he in a very few weeks is in as bad if not a worse condition than when he first entered the Sanatorium.

Another reason is, that in many cases of the poorer working man with a family, the advantage of continuing the fresh air treatment is impossible. He has learnt to appreciate fresh air and plenty of it, but on his return to his home he finds it a very difficult matter to convince the other inmates of the value of fresh air. In the summer months he may succeed, but during winter too often other members of the household complain, and, for the sake of peace, up goes the window. This is unfortunate, for, apart from

consumption altogether, fresh air is one of nature's finest tonics. It is one of the few commodities which have escaped taxation, and this possibly gives a reason why more advantage is not taken of it. One could almost realise that a tax on closed windows would result in a great improvement in the general health of a community.

I believe in the educative side of a short residence in a Sanatorium—say for a period of a month or so—but feel that after that period the money could be expended more profitably in domiciliary treatment than in a continued residence in a Sanatorium.

But what must be our aim, and this applies particularly to a body which exercises control over a city's health, is not so much the arrest of the disease *as the prevention of the disease arising at all*. The key to the whole situation undoubtedly lies in this. Insanitary dwellings, overcrowding, dirty back courts, filthy ashpits, &c., must be abolished.

Overcrowding implies the breathing of vitiated air, and predisposes towards consumption—vitiating air, which is rendered a perfect poison if one of the household should be suffering from consumption and takes no heed where he expectorates. This factor is of vital importance, and if the poor, who are likely to be the greater sufferers in this respect, could only be educated to the fact that a great latent power lies within themselves, and were assured that Local Authorities were doing their utmost to aid them, one of the most potent factors in the promotion of disease would be a thing of the past.

Again, by the demolition of slums, by the improvement of dwellings, the paving of back courts, and the removal of ashpits, one can confidently hope for a decrease in the deaths from consumption. All this requires money, but I know of no better object to which money can be directed than the prevention of disease, and the maintenance of health.

(3.) LOCAL DISEASES.

The number of deaths registered under this class was 286. These causes give a death rate of 8.4 per 1000, as compared with 7.6 in 1927. One death was attributed to diseases of the lymphatic system, and one to a disease of an organ of locomotion, while deaths

as the result of "confinement" numbered two, being the same as in the previous year. No death resulted from diseases of the organs of special sense.

As has been the case in previous years, deaths from nervous, respiratory and circulatory causes are the most prominent.

As regards respiratory troubles, Broncho-Pneumonia is the commonest, followed by Pneumonia and Bronchitis. 11 deaths of infants, 7 deaths of children between 1 and 5 years of age, and 19 deaths of persons over 65 years of age occurred from pulmonary trouble. This is the same number as last year.

Attention has already been drawn to the number of infantile deaths from respiratory disease, and when we add to that number the number of those dying between the age of one and five years, we have a total of 18—a figure 5 less than last year, but a figure surely capable of reduction. Nay, does it not give ample proof of carelessness or ignorance on the part of many parents that 20 per cent. of infantile deaths and 35 per cent. of deaths between 1 and 5 years should result from Respiratory trouble. The respective percentages last year were 34 and 40.

Nervous diseases account for 55 deaths. No less than 40 deaths took place from apoplexy, and of these the great majority occurred in people over 60 years of age; in fact, no less than 28 occurred in persons over 65. As regards diseases of the Circulatory System, 34 deaths were attributed to heart disease and 9 to syncope, and a large number to disease of the arteries.

(4). VIOLENCE.

The number of deaths attributed to "violent" causes during the year was 31, being 8 more than in 1927. Two were due to railway vehicles, and no less than 8 were the result of motor accidents. Drowning was the cause in 7 instances, while 3 deaths arose as the result of fall, &c. No death occurred in an infant from overlying, but 2 deaths resulted in children from burns. There was 1 case of lysol poisoning, 4 from coal gas poisoning, while 1 death resulted from hanging and cut throat.

The cases attributed to suicide numbered 14, being 7 more than in 1927.

SUMMARY OF DEATHS (INCLUDING DEATHS OF CITIZENS
OUTWITH THE CITY).

I. SPECIFIC FEBRILE OR ZYMOTIC DISEASES—

			1925	1927
1. Miasmatic Diseases	...	...	13	32
2. Diarrhœal (Enteritis, etc.)	...	...	—	—
3. Malarial	...	...	—	—
4. Zoogeneous	...	...	—	—
5. Venereal	...	...	—	—
6. Septic	...	...	4	4

II. PARASITIC DISEASES — —

III. DIETETIC DISEASES 2 2

IV. CONSTITUTIONAL DISEASES .. 88 79

V. DEVELOPMENTAL DISEASES ... 49 38

VI. LOCAL DISEASES—

1. Diseases of Nervous System	...	60	51
2. Diseases of Organs of Special Sense	...	—	—
3. Diseases of Circulatory System	...	115	113
4. Diseases of Respiratory System	...	50	52
5. Diseases of Digestive System	...	34	17
6. Diseases of Lymphatic System and Ductless Glands	...	1	—
7. Diseases of Urinary System	..	24	19
8. Diseases of Organs of Generation	...	1	3
9. Diseases of Organs of Parturition	...	1	2
10. Diseases of Locomotary System	...	1	—
11. Diseases of Integumentary System	...	—	—

VII. VIOLENCE—

1. Accident or Negligence	...	17	16
2. Suicide	...	14	7

VIII. ILL-DEFINED OR NON-SPECIFIED

CAUSES	...	16	11
--------	-----	----	----

Total	...	500	446
-------	-----	-----	-----

NOTIFIABLE INFECTIOUS DISEASE.

The total number of notifiable diseases recorded during the year 1928 was 370, as compared with an average of 336 in the previous ten years.

TABLE SHOWING THE WARD DISTRIBUTION OF CASES NOTIFIED DURING THE YEAR 1928, WITH NUMBER OF CASES TREATED IN HOSPITAL.

NATURE OF DISEASE.	WARD 1.		WARD 2.		WARD 3.		WARD 4.		WARD 5.		WARD 6.		Treated in Hospital	Treated in Home	Total
	Under 5 years	5 years & over	Under 5 years	5 years & over	Under 5 years	5 years & over	Under 5 years	5 years & over	Under 5 years	5 years & over	Under 5 years	5 years & over			
Chickenpox, ...	6	3	8	5	...	4	1	1	1	4	...	2	...	35	35
Typhoid Fever, ...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1
Ophthalmia Neonatorum,	2	...	1	...	...	...	1	...	1	...	...	...	2	3	5
Pneumonia, ...	...	2	...	2	...	1	...	7	...	7	...	...	4	15	19
Scarlet Fever, ...	2	10	6	13	2	27	4	21	1	18	1	11	92	24	116
Diphtheria, ..	6	18	1	10	...	12	1	22	6	35	...	3	109	5	114
Erysipelas, ..	...	1	...	6	...	4	...	9	...	2	...	1	6	17	23
Phthisis, ...	...	6	...	7	...	7	...	3	...	4	...	1	10	18	28
Tuberculosis other than Phthisis,	2	6	1	1	...	1	1	2	2	6	...	...	16	6	22
Encephalitis Lethargica	...	1	...	...	...	...	...	2	...	...	...	...	2	1	3
Puerperal Fever, ...	...	2	...	...	...	...	...	...	...	...	...	...	2	...	2
CerebroSpinal Fever,	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1
Malaria, .	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...
	18	49	17	44	2	56	8	69	11	77	1	18	245	125	370
TOTAL,	67		61		58		77		88		19				

As compared with the previous year there has been 122 less cases notified. This decrease is largely accounted for by the fall in the number of cases of Chickenpox, this disease accounting for 196 cases in 1927, as compared with 35 this year.

I am glad to report that there has been no recurrence of Small-pox or Typhus Fever. It is nearly thirty years since there was a case of the latter disease in Perth, and then it was a case of a tramp from Glasgow. One case of Cerebro-Spinal Fever and three cases of Sleeping Sickness were notified. For the second year in succession there has been no case of Typhoid Fever, the one case reported being admitted into the Infirmary from the County.

The average monthly number of cases was 31, being exceeded on four occasions, these occurring mainly in the last quarter of the year. The largest number of cases was reported in October. November and December, the result of the large number of cases of Diphtheria, the cases for these months being 20, 23 and 19 respectively. The smallest number occurred in April, when only 21 cases of infectious disease were notified, followed by 22 and 24 in January and February. In fact 36 per cent. of the cases were notified in the last quarter of the year.

As regards the age period, 57 were under 5 years of age, and 314 above that period. Last year the number affected at the infant period was 24 per cent. of the total. This year the percentage has declined, having fallen to 15 per cent. Of the infant cases 28 per cent. were Chickenpox, 28 per cent. Scarlet Fever, and 24 per cent. Diphtheria.

The number of these notifiable cases, including one or two cases in the Infirmary, treated in Hospital or Sanatorium was 242, or 65 per cent. of the total cases, the same percentage as in the previous year.

With reference to the Ward Distribution of these Infectious Diseases, if we consider (which is the proper way) the cases as so many per 1000 of the population of each Ward (or better still, were that possible, as so many per 1000 of the young people in each Ward) we find that Ward 6 with 5.7 per 1000 stands for the year as the Ward freest from infectious trouble, while Ward 4, followed by Ward 5, was the most affected.

The figures for the various Wards are:—

Ward 1	=	10·9	per 1000 of estimated population,	1927 15·1
Ward 2	=	8·9	„ „ „	13·2
Ward 3	=	10·8	„ „ „	10·7
Ward 4	=	14·9	„ „ „	18·6
Ward 5	=	12·8	„ „ „	14·5
Ward 6	=	5·7	„ „ „	12·9

In 1927, Ward 3 was the freest from infectious disease, followed by Ward 6, whereas this year the premier position is taken by Ward 6. It may also be noted that, as in the previous two years, Ward 4 was the most affected.

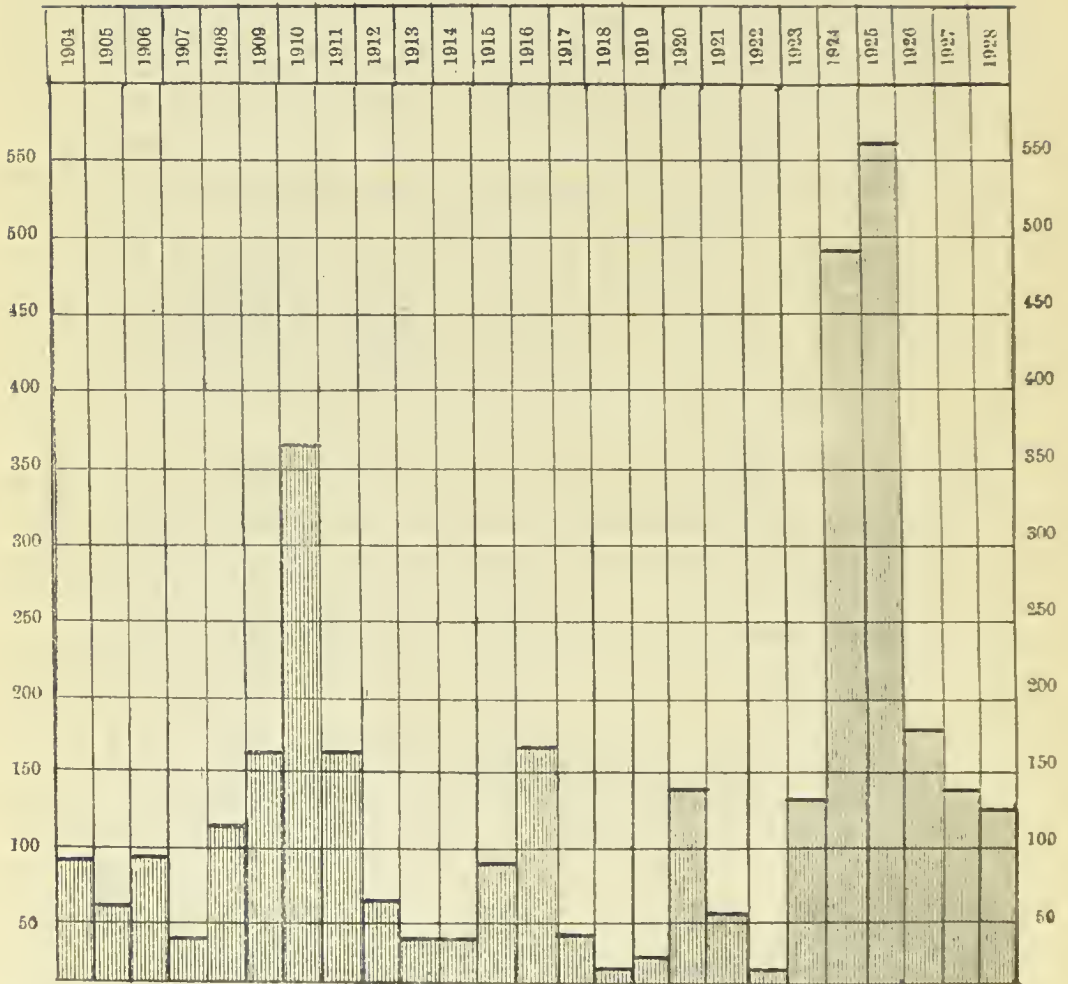
TABLE SHOWING THE PERCENTAGE OF CASES TREATED IN
HOSPITAL DURING 1928.

DISEASE.	Total.	Treated * in Hospital or Sanatorium.	Percentage of Cases treated in Hospital.
Chickenpox, . . .	35	...	...
Typhoid Fever, ...	*1	1	100
Oph. Neonatorum, ...	5	3	60
Pneumonia,	19	4	21
Scarlet Fever, ...	116	92	89
Diphtheria,	114	109	95
Erysipelas,	23	6	26
Encephalitis Lethargica	3	2	66
Phthisis,	28	10	35
Tuberculosis (other than Phthisis),	23	13	56
Puerperal Fever, ...	2	2	100
Cerebro Spinal Fever	1	...	100
Malaria	1	...	...
Total,	371	242	65

*County case.

SCARLET FEVER.

CHART SHOWING THE NUMBER OF CASES OF SCARLET FEVER
NOTIFIED DURING THE PAST TWENTY FIVE YEARS.

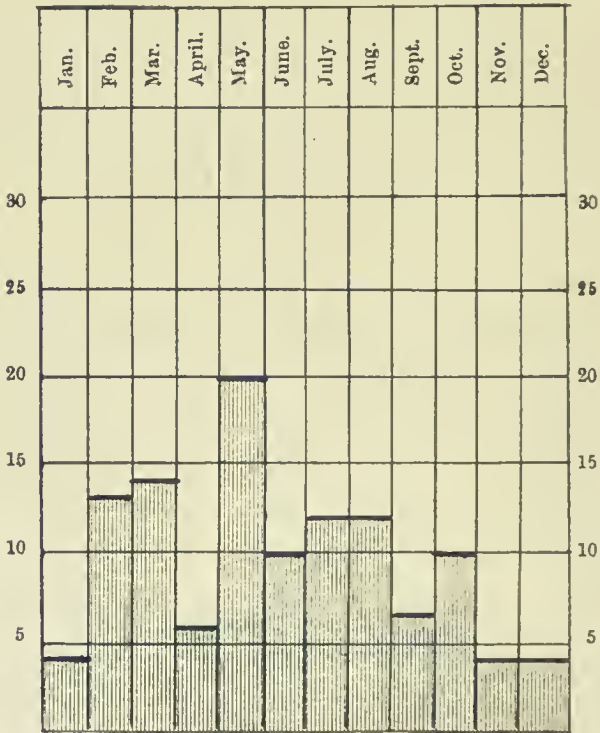


A glance at the chart recording the cases during the past twenty-five years will clearly show the tendency of this disease to lie more or less quiescent for some years and then manifest itself.

In 1922 only 19 cases were notified, followed in the following year with 138. In 1924 there was an increase of 357. In the following year there was a further increase, this figure being exceeded by 68, viz.:—563, and constituting a record in the annals of the City. In 1926 there was, as was to be expected, a marked decrease, the number having fallen to 172, or 391 less than in 1925, followed in 1927 with 140 cases. This year the number had further declined to 116, and, as will be noted from the monthly chart, the disease was most prevalent in the second quarter of the year. The lowest point reached was during the months of January, November, and December, the cases for these months numbering 4. It is rather exceptional to find that the last quarter of the year was the quietest, only 18 cases being then recorded as compared with over 30 in each of the other quarters of the year.

During the first and third quarters of the year there were 31 cases or 26 per cent., while in the second quarter the cases numbered 36 or 31 per cent. The fourth quarter, with its 18 cases, was equivalent to 15 per cent. of the total cases. The greatest number in any one month occurred in May, when 20 cases, or 17 per cent. of the total, were notified. This was followed by the month of March, when there were 14 cases. As already stated, the lowest number in any single month was in January, November, and December, viz., 4.

CHART SHOWING THE NUMBER OF CASES OF SCARLET FEVER
DURING THE YEAR 1928



As regards the sex, 55 cases occurred among females and 61 among males ; while as regards the age period, 15 occurred among children under 5 years of age, or 12 per cent. This is a lower percentage than the previous year, when it stood at 25 per cent. As regards the other age periods, 73 or 62 per cent. occurred between 5 and 15 years, 18 or 15 per cent. between 15 and 25 years, and 9 or 7 per cent. between 25 and 45 years.

As regards the Ward Distribution, Ward 1 is the lowest with 1·9 per 1000, followed by Wards 2 and 5 with 2·7 per 1000. Ward 3, followed by Ward 4, had the highest. The figures relating to the various Wards for 1928, with comparison for 1927, are as under :—

		Cases.	1927.
Ward 1	...	12 or 1·9 per 1000,	5·5 per 1000.
Ward 2	...	19 or 2·7 ,,	2·9 ,,
Ward 3	...	29 or 5·4 ,,	2 ,,
Ward 4	...	25 or 4·8 ,,	4·8 ,,
Ward 5	...	19 or 2·7 ,,	4·3 ,,
Ward 6	...	12 or 3·6 ,,	4·8 ,,

The number removed to Hospital was 92, or 89 per cent. of the whole. In the previous year the percentage was 73.

Although there were several cases in which the type of fever was virulent, with a corresponding degree of complications, the mortality rate notwithstanding was not high. There was only 1 death, representing a death rate of ·089 per 1000, or a case mortality of ·8 per cent. as compared with 2·1 in the previous year

DIPHTHERIA.

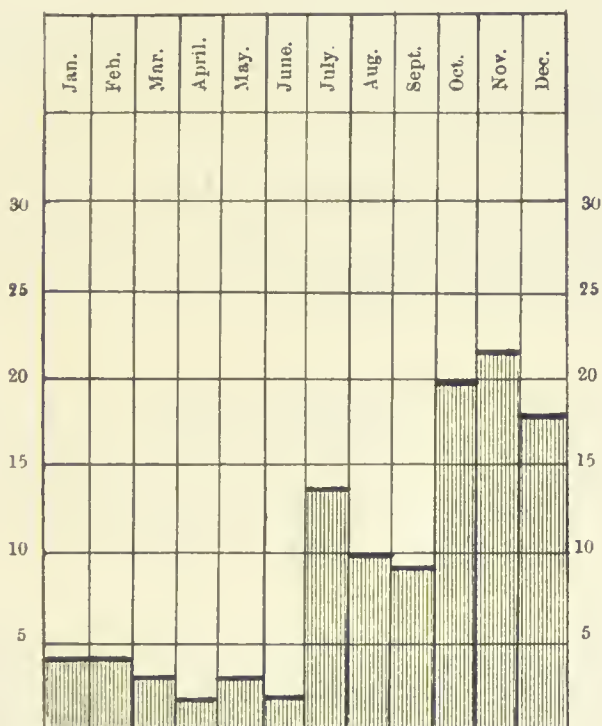
CHART SHOWING THE NUMBER OF CASES OF DIPHTHERIA DURING
THE PAST TWENTY-FIVE YEARS.



As is evident from the foregoing chart, Diphtheria was epidemic in the City during the years 1910-1912, and again in 1915-1916. Since the latter year there was, with the exception of 1919 and 1920, a continuous decline, reaching in 1925 a number which was the lowest yet recorded, viz., 11. In 1926 the number showed a slight increase, viz., 17; followed in 1927 by a further increase, the number notified being 63. This year the rise continued, the number of cases reported being 114.

The average monthly notification was 9, but this figure was reached only in the last half of the year. During the first six months of the year the monthly number never exceeded 4, whereas in the last quarter of the year 60 cases, or 52 per cent. of the total, were reported, the maximum monthly notification, viz. 22, occurring in November.

CHART SHOWING THE NUMBER OF CASES OF DIPHTHERIA
DURING THE YEAR 1928.



The Wards most affected were Wards 5, 1 and 3, while Ward 6 had only 3 cases throughout the year, or only 2·7 per cent. of the total. Most of the cases occurred during the last three months of the year, as already stated 52 per cent. happening at this period. The largest number of cases occurred in the months of November, when 22 cases were reported, followed by October and December with 20 and 18 cases. In the months of April and June only 2 cases were reported.

Females were more affected than males, the figures, out of a total of 109 cases being 56 and 53 respectively.

With reference to the age period, 14 cases occurred in children under 5 years of age, representing 12 per cent. of the total cases. This is not a large percentage.

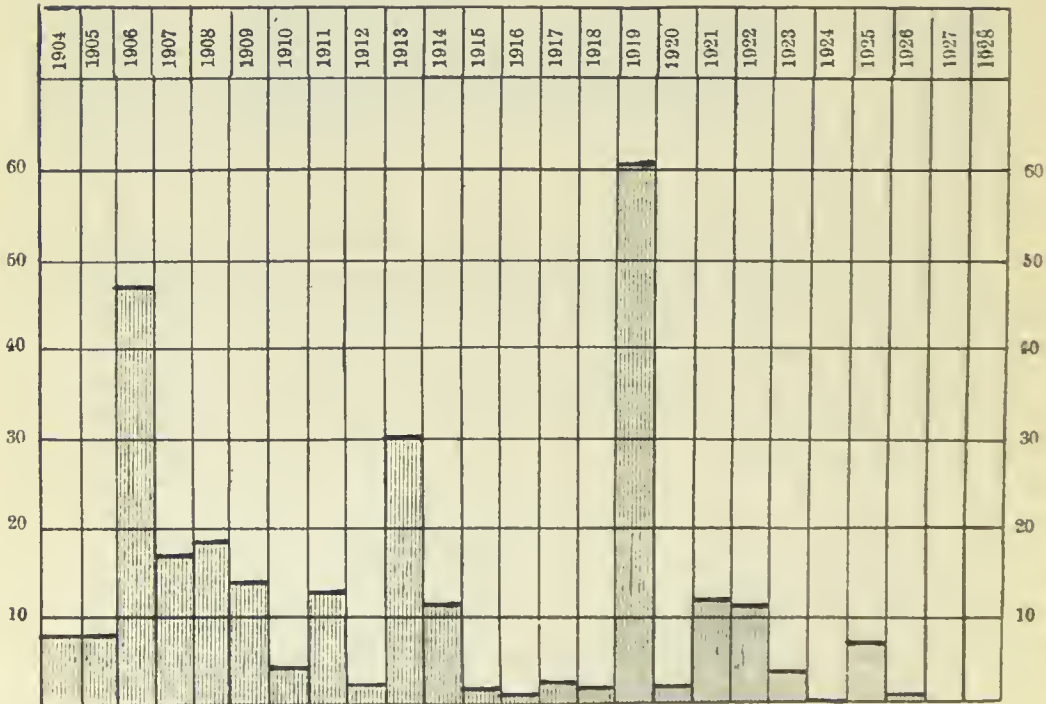
As regards the other age periods. 78 or 68 per cent. occurred between 5 and 15 years, 13 or 11 per cent. between 15 and 25 years, 8 or 7 per cent. between 25 and 45 years, and 1 between 45 and 65 years of age.

Only 2 deaths occurred from this disease during the year, both taking place between 5 and 15 years of age. Last year 7 deaths occurred from this cause.

This brings out the percentage of deaths to notifications as 1·8, and shows an extremely low mortality. The number removed to the Isolation Hospital was 109, or 95 per cent., the same percentage as in the previous year.

TYPHOID FEVER.

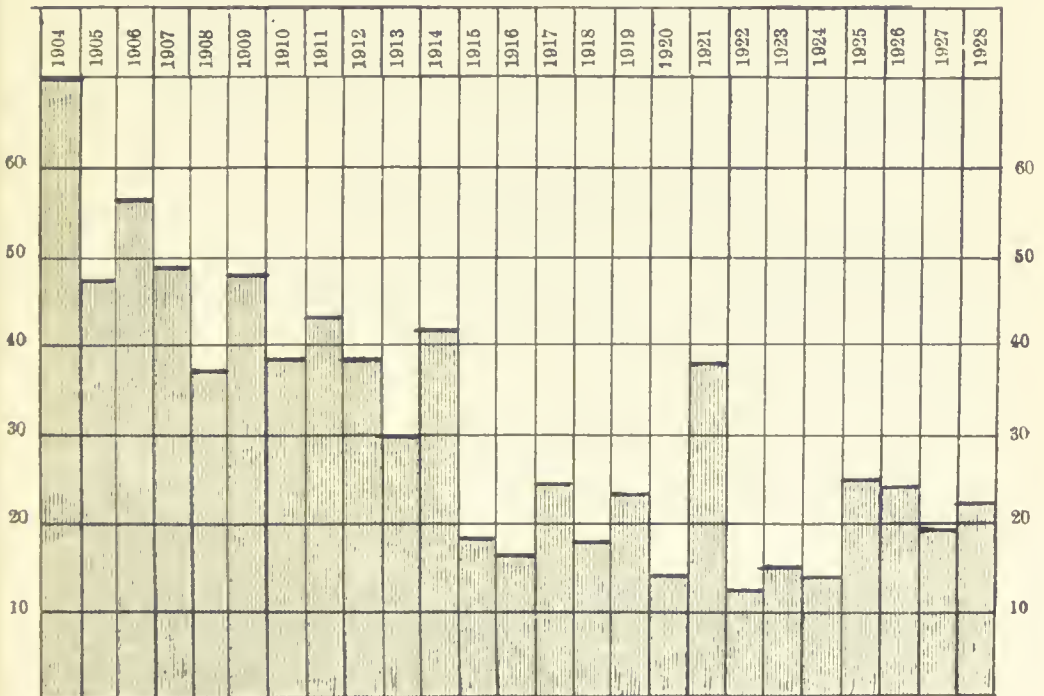
CHART SHOWING THE NUMBER OF CASES OF TYPHOID DURING
THE PAST TWENTY-FIVE YEARS.



During the year 1 case of Typhoid Fever was notified. As this was a case admitted from the County into the Infirmary it falls to be recorded that for the second year in succession there has not been a single case of Typhoid Fever. In 1924 also there was no case, so that during the last five years Perth, as regards this disease, for three periods of a year has had a clean bill of health.

ERYSIPELAS.

CHART SHOWING THE NUMBER OF CASES OF ERYSIPELAS DURING
THE PAST TWENTY-FIVE YEARS.



This disease showed a slight increase during the year, 23 cases, as compared with 19 in 1927, being notified. As is usual with the disease, the great majority of the cases were among people well up in years, 6 occurring in persons from 25 to 45 years of age, 8 from 45 to 65 years, and 2 over 65 years, the oldest age being 78 years.

It is only under exceptional circumstances that such cases are removed to Hospital—such, for instance, as residing in a caravan or lodging-house, or where it is impossible for the affected person to get the attention necessary. No case is removed for fear of the disease affecting others. Six cases were treated in Hospital, representing 26 per cent. of the total cases.

PUERPERAL FEVER.

Two cases of this fever were reported during the year, as compared with three in 1927. Both cases terminated fatally, one dying in Hospital, and one in the Royal Infirmary.

CEREBRO-SPINAL FEVER.

One case of this disease occurred during the year. This is the first case since 1924. The case was that of a child, and terminated unfavourably.

ENCEPHALITIS LETHARGICA.

There were three cases of Sleeping Sickness reported during the year—the same number as in the previous year. Two of the three cases were treated at the Royal Infirmary, and two of the cases died.

MALARIA.

One case was notified during the year.

INFECTIVE JAUNDICE.

No case of this disease was reported.

SMALLPOX.

As already stated, no case of this disease occurred in the city during the year. Considering that Perth is situated on the highway between Glasgow and Dundee, in which latter town the disease had again appeared it was most fortunate that we escaped.

CITY HOSPITAL, EDINBURGH ROAD, PERTH.

RETURN OF PATIENTS FOR THE YEAR 1928.

DISEASE.	In Hospital at end of 1927.	Admitted	Discharged.	Died.	Remain- ing in Hospital.	Age of Patients Admitted.	
						Under 5 years.	Over 5 years.
Scarlet Fever ...	15	92	104	1	2	16	76
Diphtheria ...	8	109	94	3	20	13	96
Typhoid Fever ...	...	...	...	...	...	...	...
Erysipelas ...	...	4	4	...	...	...	4
Puerperal Fever ...	...	3	2	1	...	...	3
Whooping Cough ...	...	1	1	...	...	1	...
Measles ...	1	6	7	...	...	3	3
Opth. Neon. ...	...	1	1	...	...	1	...
Phthisis ...	...	5	2	3	...	...	5
Tuberculosis ...	1	3	2	...	2	2	1
Scabies ...	...	2	2	...	...	1	1
Total Zymotic Cases	25	226	219	8	24	37	189

The total number of admissions during the year 1928 was 226, as compared with 203 in the previous year; and the number admitted since the opening of the Hospital on 30th October, 1906, is 4514.

There have thus been 23 more cases admitted than in 1927. The greatest number ever admitted in one year was 488, and this occurred in 1925, closely followed in 1924 with 471.

The average monthly number admitted was 18, but there was considerable variation in the numbers throughout the year. Thus the average monthly number admitted during the first quarter of the year was 10, second quarter 16, third quarter 21, and fourth quarter 26. One is not surprised at the highest number occurring in the fourth quarter, but it is unusual to find the first quarter as lowest. The greatest number admitted in any one month

was 27 in the months of November and December, and the least number was in January, viz., 10.

The number of Scarlet Fever cases was 92, and is 16 less than in 1927.

The average stay in Hospital of the Scarlet Fever cases has been considerably less than in the previous year, viz., 32 days, as compared with 37 in 1927. This has been largely accounted for by fewer cases, owing to ear and nasal discharges, requiring a long period of stay in hospital. The case longest in hospital was that of an infant, whose stay extended to over 11 weeks.

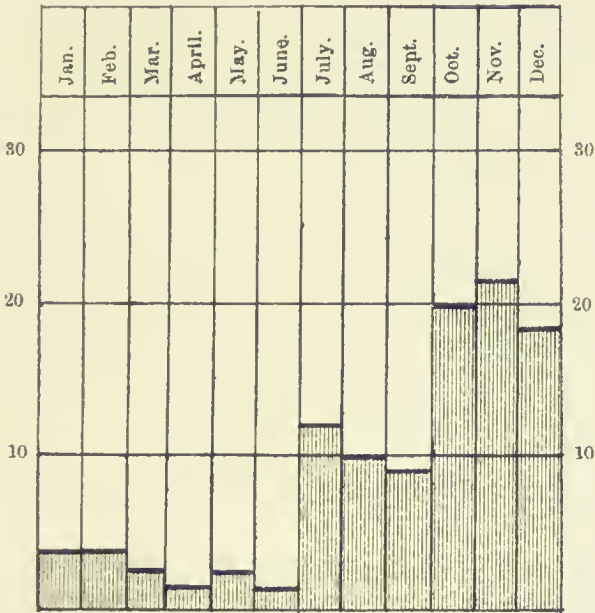
In 1919 the average stay in Hospital was 35 days, previous to which it was 6 weeks. In 1920=32 days, 1921=28 days, 1922=24 days, 1923=23 days, 1924=32 days, 1925, 1926, 1927=37 days, while this year it was 32 days.

Of the 104 discharged cases—6 were in a period of 2-3 weeks, 43 3-4 weeks; 41, 4-5 weeks; 7, 5-6 weeks; 3, 6-7 weeks; 1, 7-8 weeks; 1, 8-9 weeks; 1, 9-10 weeks; and 1 over 12 weeks.

From figures like these, it is evident that the period of stay in hospital is an unfixed quantity, and that the popular view of six weeks detention is both a minimum and maximum period necessary for isolation is an erroneous one. Every case must be judged by itself. By the procedure carried out at the hospital during the past 8 years, the public have now been educated to the fact that many cases cease to be infectious as early as four weeks or less. The shortest period was 11 days and the longest 85 days.

As regards Diphtheria, 109 cases were treated during the year. This is the largest number since 1921, and no single month passed without the admission of a case into hospital. The largest number was admitted in November, viz., 23, followed by October with 20. In fact, the last quarter of the year was responsible for 62 cases, or 56 per cent. Many of the cases were of a severe type, yet, notwithstanding, the mortality was very low. The number of deaths from this disease was 3, giving a case mortality of less than 3 per cent. One case of an infant required tracheotomy and made a good recovery.

CHART SHOWING THE MONTHLY ADMISSION OF CASES
FOR THE YEAR 1928.



Erysipelas accounted for 4 cases and Puerperal Fever for 3. Of the latter two cases were from Clackmannan.

In the early part of the year 6 cases of Measles were admitted and one case of Whooping Cough, and all terminated favourably.

The number of tubercular cases was lower than that of the previous year, viz., Phthisis 5, and Tuberculosis 3. Of the former, which were of the advanced type, 3 died.

The total number of deaths in the Hospital from all diseases during the year was 8, 3 from Diphtheria and Phthisis, and 1 from Puerperal and Scarlet Fever, giving the very low case mortality of 3·5 per cent

ADMINISTRATIVE BLOCK.

The additional bedroom accommodation for nurses in the back portion of the Administrative Block, referred to in my last Report, is now occupied ; and re-decoration of the bedrooms in the older portion of the building carried out.

SCARLET FEVER BLOCK.

The separate heating system which was provided in the Scarlet Fever Block has proved, during the recent intensive cold weather, a great comfort to the patients. A regular heat can be obtained in the Wards, and the smoke nuisance, by dispensing with open fires, is now removed, while an ample supply of hot water is obtained from a separate boiler.

TYPHOID AND DIPHTHERIA BLOCK.

A system of hot water heating in the Typhoid and Diphtheria Block similar to the one in the Scarlet Fever Block has now been installed. A boiler has been placed at the north end of the block, where, owing to the slope on the ground, there is considerable under-building. The hot water pipes are laid underneath the floors, with branches to radiators placed conveniently for the heating of the various apartments. As in the Scarlet Ward, there had been considerable trouble with smoke from the fireplaces. The site of the building in relation to the higher ground led to constant down-draughts in the chimneys when the wind was out of a particular direction. All sorts of contrivances had been tried before, but proved ineffectual. In addition a separate boiler for the supply of hot water, which previously was only obtainable for baths when the boiler in the laundry was in use (*i.e.*, one day a week) or from the kitchen range, has been installed. A regular heat can now be had in all the Wards of the Hospital, the smoke nuisance is removed, and such a supply of hot water is obtained that baths can be got at any time.

MATERNITY AND CHILD WELFARE CENTRE.

Committee.

President—Mrs. HOWMAN.

Vice-President—Miss MAXTONE GRAHAM.

Hon. Secretary—Miss M'NAB.

Hon. Treasurer—Mrs. VASS.

Lady GEORGINA HOME DRUM-
MOND.

Mrs. LINDSAY.

Mrs. J. RITCHIE.

Mrs. THOMSON.

Mrs. FALCONER.

Mrs. M'INNES.

Miss WILKINSON.

Miss MURDOCH.

Miss DUNCAN.

Mrs. DEMPSTER.

Mrs. MOWAT WILSON.

Mrs. LITTLE.

Mrs. J. WOOD.

Voluntary Workers.

Miss BUCHAN.

Mrs. GILL.

Mrs. ROSS.

This Institution has now been in existence for $11\frac{1}{2}$ years, and continues to be not only a popular rendezvous, but a fruitful source of instruction. The work of organising and managing it is, as it should be, done by ladies, for the work and interest belong mainly to the sphere of womanhood. Perth has been distinctly fortunate in its Ladies' Committee, which has willingly given a great deal of time and devoted much attention to the work, and it has had its reward in the knowledge that its work has been appreciated by the mothers attending the Centre.

It is therefore with pleasure that I have to record another year of progress in this branch of Public Health, and while recognising that the duty of bringing up children belongs to the mother, and that we must not be too ready to relieve them of their responsibility, yet we must see that the rights of the children are not ignored, and that the mothers have the opportunity given them of learning how best to rear their children.

Mothers, with few exceptions, are anxious to do all they can for their babies, and it is generally due to ignorance and carelessness rather than wilful neglect when they do not do all that is right.

One has the greatest sympathy for parents who lose their children, especially when one sees them working hard to bring them up in squalid surroundings. Competent and good mothers are to be found living side by-side in the same street with ignorant and careless ones. The husbands of each are earning possibly the same wages, the rent the same, yet the home of the one will be clean, the children clean and attending school regularly ; while next door dirt and squalor abound, and only two or three out of probably a large family have been successfully reared. The essential difference will be the amount of intelligence and care bestowed upon infant life, and the wise or unwise spending of the wages for the comfort of the family in the two cases. If the parents keep steady, are intelligent, and do not waste their income, they can do a great deal.

Ignorance of baby management is the cause of baby not thriving in so many cases. Hospital experience bears this out. It simply means that the mother lacks the intelligence or the care to feed and manage the baby properly, and to combat this ignorance is the problem of the Welfare Centre, and this is best done by the Health Visitors going and visiting the parents *in their own homes*, where the mothers are taught and their ignorance dispelled more effectually in this way than in any other. The mothers get confidence in the Health Visitors, and soon seek their help and advice.

As will be gathered from the attendances, the Centre has proved itself a popular rendezvous, where the large majority of mothers are not only keenly anxious to learn anything relating to the welfare of their child, but gain information useful to the conduct of their domestic affairs.

The Centre consists of a hall (where perambulators are stored), a waiting room, a weighing room and a doctor's consulting room. It is situated in an ideal place for its purpose, and has far from outlived its usefulness, but there are occasions when its capacity is overtaxed, as can be judged when it is stated that one afternoon the attendance of mothers and children was over 70.

At first the Centre was open only on Thursday afternoon, but so well patronised has it been by the mothers and children—it is no exaggeration to say the undertaking has been a huge success—that it was found necessary to have two afternoons weekly (Tuesday and Thursday) for baby weighing and consultations.

The Centre is fortunate in its "Ladies Committee," of which Mrs. Howman is President and Miss M'Nab, Secretary, the members of which are thoroughly imbued with the importance of the work, and the amount of good work performed by this voluntary organisation in the tilling of the soil for the welfare of the children cannot be over-estimated. The sympathy and kindness extended to the mothers has probably been the main factor in the Centre's success. All are made welcome and all are made "at home." On the other hand mothers are taking an increasing interest, and are finding it profitable in more ways than one. But the labours of the Committee have not been confined to conversations with the mothers, although the social element has never been lost sight of, nay, is made the most of, and a Sewing Class started in 1919 has been one of the most successful branches of the work.

The class meets on Wednesday afternoons throughout the winter months, and from the regularity of the attendance it is evident that the mothers appreciate it. Many new garments are made, but the re-making of old ones is the chief feature, and many a most unlikely article—cast off garments, legs of stocking, &c.—has been transformed into a useful article for baby.

The garments cut out during the year numbered 259, and many articles of the mother's workmanship were exhibited in the windows throughout the year.

The class started on the Wednesday evenings six winters ago for young women and those mothers who were unable to attend the afternoon session has been continued, and it is pleasing to record that the attendance of the younger members has been very gratifying, and that much good work is being done. The total attendances were 842.

Two years ago a "Baby Basket" scheme was inaugurated by the Ladies' Committee on behalf of necessitous cases. These are given gratis, and means the giving of woolies—two to three garments constituting a basket. During the past year 72 garments were given.

Another important feature which has continued to meet with success is the Savings Bank. This branch is under the able superintendence

of Mrs. Vass, Benview, Mrs. Ritchie and Miss Smart, Rockbank and Miss McNab, Fitzroy Terrace. Anything from a penny upwards is received, and the mother is free to take any or all whenever she desires. The number of depositors during the year was 151, being a decrease of 11 from the previous year, and the sum deposited £8 3s. 5d. Money was withdrawn to the extent of £11 4s. 4d. and it is pleasing to record that in nearly, if not in all instances, the money was withdrawn in order to buy something for baby, the purchase generally being made from the Work Stall of the Centre, which is under the supervision of Mrs. Lindsay. It may be stated that these goods are the work of the Needlework Guild. This Guild consists of 50 members, of whom Mrs. Thomson, Magdalen Bank, is Convener. It has rendered most valuable work, and a work highly appreciated by the mothers. Every article is sold to the mother at the bare cost of material. Thanks are also due to many of the Church Work Parties who contributed many serviceable articles of clothing.

The number of depositors in the first year was 66, and the number on the roll at the end of 1928 was 151. The following is a record of the year's work :—

Balance at 31st December, 1927,	...	..	£16	3	10
194 Deposits lodged during 1928,	...	...	8	3	5
			<hr/>		
			£24	7	3
30 Withdrawals during 1928,	...	...	11	4	6
			<hr/>		
Balance at 31st December, 1928,	...	...	£13	2	9
			<hr/>		

Of this balance, there had been placed to the Savings Bank Central Fund (baby bank) the sum of £11 3s 3d, on which interest had accrued to the amount of £3 17s 0d. When baby's bank account reaches £1, this is placed into a personal Savings Bank Book. This book is kept at the Centre until the child reaches school age.

One child who had reached school age had her bank book handed over to her mother—the sum being £1 13s 0d.

Unemployment, largely the result of the strike during the year hit the bank very badly, but to the mother's credit, unless circumstances made it absolutely essential, baby's bank book remained untouched, and even then a shilling was left in order to keep the bank account open. Most of the money went in the provision of boots for the children.

On January 30th, a most successful tea party to the mothers, toddlers and babies attending the Centre was arranged by the Ladies' Committee. The attendance was most gratifying, and the function much enjoyed. Several members of the Ladies' Committee, along with friends, contributed in a large measure towards the success of the function, while special mention must be made of Miss Smith and her juvenile girl dancers, and Mrs. Bruce, Murthly, Miss Murdoch, and Miss Duncan, who were responsible for the Christmas tree and other decorations.

On 25th July, Lady Georgina Drummond once more showed her kindness by inviting the mothers and babies to the grounds at Hamilton House. Nature was fortunately in a kindly mood, and a happy afternoon was spent by a gathering of about 400.

The average attendance of mothers and babies at the Centre was 390 per month, as compared with 387 in 1927, and an average of 371 in the previous five years.

The number of medical consultations at the Centre during 1928 was 299, as compared with 232 in 1927. The variety of illnesses can best be gathered from an examination of the statistics given later in the report.

MIDWIVES (SCOTLAND) ACT, 1915.

(1) *List of the Midwives* (with their Names in alphabetical order, Enrolment Numbers and Addresses) who have up to 31st January, 1929, given notice under Section 18 of their intention to practice in the District.

LIST OF MIDWIVES, JANUARY, 1928.

Reg. No.	NAME.	ADDRESS.
2370	Isabella Anderson, - -	9 Commercial Street.
2228	Mary B. Barclay, - -	32 Caledonian Road.
5455	Christina M'Nab Cameron,	Garage House, Station Hotel.
804	Hannah B. Clarke, - -	33 Scott Street.
5182	Margaret Dickson, - -	2 Robertson's Buildings.
4323	Margaret M'Gregor Doig, -	2 Florence Place.
2428	Margaret J. Forbes, - -	85 Princes Street.
1898	Elizabeth Laing, - -	20 Market Street.
578	Isabella H. Mackay, - -	Braehead, Jeanfield.
2583	Ann M. Malcolm, - -	4 South Methven Street.
4014	Lilias Moncrieff, - -	36 Jeanfield Road.
2289	Catherine R. M'Lean, - -	8 Hospital Street.
1775	Annie M'Quhae, - -	11 Gowrie Street.
2479	Annie Robertson, - -	18 Watergate.
3175	Margaret Williamson, - -	30 South Street.
6148	Catherine Whytock, - -	58 Scott Street.

(2) Births in Area or District.

Total Number of Births during 1928.	Total Number of Deaths of new-born children (within ten days) during 1928.	Actual Number of Births attended by Midwives during 1928.	Actual Number of Deaths of new-born children (within ten days) occurring in the practice of Midwives during 1928.	Actual Number of Cases not attended by a Doctor or Midwife during 1928.
617.	16.	78.	—	Births. — Deaths. —

(3) Cases of Ophthalmia Neonatorum.

Total Number of Cases during 1928.	Actual Number of Cases occurring in the practice of Midwives during 1928.	Actual Number of Cases occurring where confinement not attended by a Doctor or Midwife during 1928.
5.	3	—

(4) Cases of Puerperal Sepsis.

Total Number of Cases during 1928.	Actual Number of Deaths during 1928.	Actual Number of Cases occurring in the practice of Midwives during 1928.	Actual Number of Deaths occurring in the practice of Midwives during 1928.	Actual Number of Cases occurring where confinement not attended by a Doctor or Midwife during 1928.
2.	2.	—	—	Cases. — Deaths. —

(5) Cases of Still-birth (Dead Born).

Total Number of Cases during 1928.	Actual Number of Cases occurring in the practice of Midwives during 1928.
26.	2.

(6) Cases of Emergency. —The number of Cases of Emergency to which medical practitioners have been called in under Section 22 of the Act during 1928 was 5. These related to two cases of prolonged labour, one to contracted pelvis and face presentation and one owing to choking condition of baby.

(7) General Remarks. —There is nothing special to record, there having been during the year no contraventions of the Act.

STATISTICS RELATING TO MATERNITY SERVICE AND CHILD WELFARE.

Infant Mortality.

(a) No. of deaths ... 52 (b) Rate per 1000 births = 84

(c) Age Groups—

Under 1 week	14
1 week and under 4 weeks,	8
4 weeks and under 3 months	9
3 months and under 6 months	9
6 months and under 12 months	12

(d) Causes of Death—

Congenital Malformations 8	Enteritis	4
Whooping Cough ... 1	Premature Birth	8
Measles 2	Atrophy Debility	9
Convulsions 2	Overlain	—
Bronchial Pneumonia 4	Injury at Birth	—
Pneumonia 2	Other Causes	9
Bronchitis 3		

Infantile Mortality is referred to in greater detail at page 12 of the Report.

Births.

(a) No. registered—Legitimate, 578 ; Illegitimate, 39.

(b) No. notified, 671. (1) Doctor, 591 ; (2) Midwife, 80.

(c) No. of Still Births, 26.

Maternal Mortality.

(a) No. of deaths from Miscarriage or Child Birth 1

(b) No. of deaths from Puerperal Sepsis 2

Home Visitation.

(a) No. of first visits	...	...	...	730
(b) No. of re-visits	...	...	...	6052
(c) No. of Infants at 6 months—				
(1) Breast Fed	...	...	...	342
(2) Partially Breast Fed	...	...	...	77
(3) Artificially Fed	...	...	...	163
(d) No. of visits to Children (1-5 years)	...	...	...	1050

Expectant Mothers—

(a) No. of first visits to expectant Mothers	...	...	...	162
(b) No. of re-visits	...	...	...	90
(c) No. of consultations	...	...	...	—

Ante-Natal Consultations.

Clinics held twice weekly on Tuesday and Thursday, 3 to 4-30 p.m.

(a) No. of attendances	...	...	...	8
(b) No. of first attendances	...	...	...	4
(c) Conditions found—				
Debility, Myalgia, Psoriasis, Pleurodynia	...	...	...	1

Post-Natal Consultations.

No. of attendances	14
--------------------	-----	-----	-----	----

Child Welfare Consultations.

(a) No. of attendances under 1 year	...	...	...	2490
,, ,, over 1 year	...	...	...	1433
(b) No. of first attendances under 1 year	...	...	...	246
,, ,, over 1 year	...	...	...	34
(c) Illnesses recorded—				
Bronchitis	...	...	...	4
Injuries	...	...	...	7
Otorrhoea	...	...	...	9
Tongue tied	...	...	...	6
Skin Diseases	...	...	...	31
Diarrhoea, Enteritis	...	...	...	21
Debility, Eye Disease, Rickets	...	...	of each	10
Hernia, Tuberculosis, Worms, Ulcer, Stom- atitis, Scabies	...	...	of each	5

Oph. Neonatorum	...	...	...	3
Syphilis, Chickenpox, Club Foot, Abscess, Ringworm, Polypus, Dentition	...	...	of each	2
Warts, Nævus, Cystitis, Strabismus, Adenoids, Whitlow, Cyst	...	...	of each	1

Ultra Violet Light Clinic.

(Royal Infirmary).

No. of attendances	...	...	...	5317
No. of cases	...	...	...	270
Note of Conditions—Rickets, Tuberculosis, Marasmus, Skin Diseases.				

Day Nursery.

No. of attendances	...	...	..	3643
Charges—8d. per day; if two, 7d. each.				
Income	...	...	...	£439 18 1
Expenditure	...	...	...	£427 15 8
Payments made by parents	...	...	...	£98 8 1

Food and Milk.

Gross cost	£52 11 10	Sums recovered	£6 18 11
No milk substitutes given.			

Measles.

No. of deaths	...	...	...	3
No. treated in Hospital	...	...	...	6

Whooping Cough.

No. of deaths	...	...	...	1
No. treated in Hospital	...	...	...	1

Ophthalmia Neonatorum.

No. of cases notified by Doctor	...	...	...	5
No. of cases notified by Midwife	...	...	...	—
No. treated in Hospital	...	...	...	2
Appreciable loss of vision	..	...	...	1

Maternity Hospital.

(Royal Infirmary).

(1) Ante-Natal cases—

No. of cases treated	16
----------------------	-----	-----	-----	-----	----

Statement of conditions found—

Conditions found	Cases	Result
Albuminuria of Pregnancy ..	7	1 died
Eclampsia	2	successful
Accidental Hæmorrhage ...	2	successful
Hyperæmesis Gravidorum ...	4	successful
Hydatidiform Mole	1	successful

(2) Abortions—

No. of cases	22
--------------	----	-----	-----	-----	----

Results	22 successfully treated
---------	-----	-----	-------------------------

(3) Abnormal or complicated confinements—

No. of cases	18
--------------	-----	-----	-----	-----	----

Conditions found	Cases	Result
Placenta Prævia ...	3	successful
Transverse Presentation	1	successful
Breech Presentation ...	14	successful

(4) Other cases of confinement—

(a) No. of normal deliveries with and without medical attendance...	217
---	-----	-----	-----	-----

(b) No. of instrumental deliveries (exclusive of those appearing under (3).	49
---	-----	-----	----

(c) No. of deaths (classified)	1 (see above)
--------------------------------	-----	-----	---------------

(5) No. of infants born—

Alive	256
--------------	-----	-----	-----	-----

Still	10
--------------	-----	-----	-----	----

(6) No. of deaths of infants under 1 week	...	13
---	-----	----

(7) No. of cases of puerperal fever	...	3
-------------------------------------	-----	---

(8) Removed from Institution	...	—
------------------------------	-----	---

Educational.

Sewing meetings held weekly from October to March.

The number of attendances was 842.

V.D. CENTRE.

The Centre was opened in May, 1923. It is a one storey brick building, and has been erected adjacent to the Out-Patient Department of the Infirmary. Its accommodation consists of (1) Office, (2) Waiting Room, (3) Treatment Room, (4) Rest Room, and (5) Irrigation Room.

It acts as an Out-Patient Clinic, no provision being made for resident cases, and is for the use of both City and County, and the times for consultation are :—

COUNTY PATIENTS :—Women—Monday, 3 to 4 p.m.

Men—Thursday, 3 to 4 p.m.

CITY PATIENTS :—Women—Monday, 6 to 7 p.m.

Men—Thursday, 6 to 7 p.m.

The following is a record of the work done :—

VENEREAL DISEASES REPORT.

THE FOLLOWING IS A RECORD OF THE WORK BY DR. TROTTER FOR THE YEAR ENDING 15TH MAY, 1928, AT THE PERTH ROYAL INFIRMARY.

	SYPHILIS.		GONORRHOEA.		SOFT CHANCER.		MIXED INFECTIONS.		CONDITIONS OTHER THAN VENEREAL.		TOTAL.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Number of New Cases,	11	12	27	6	—	—	—	—	12	4	50	22
Number of persons who ceased to attend the Centre <i>after</i> completing the course of treatment, but before final tests, ...	5	4	—	—	—	—	—	—	—	—	5	4
Number of persons transferred to other Treatment Centres after treatment, ...	—	—	—	—	—	—	—	—	—	—	—	—
Number of persons discharged from the Centre,	8	9	29	6	—	—	—	—	12	4	49	19
Number of persons who, at the end of the year, were under treatment or observation,	18	11	4	2	—	—	—	—	—	—	22	13
Total attendances of all persons,	350	180	556	198	—	—	—	—	27	9	933	387
Do. do. do. in 1927,	357	201	378	130	—	—	—	—	24	7	759	338

Area in which patient resided :—		CITY AREA.		COUNTY AREA.		OTHER SCOTTISH AREAS.		TOTAL.	
Number of persons from each area dealt with during the year for the first time :—									
(a)	SYPHILIS,	18		4		1		23	
(b)	GONORRHOEA,	27		6		—		33	
(c)	SOFT CHANCRE,	—		—		—		—	
(d)	MIXED INFECTIONS,	—		—		—		—	
(e)	Conditions other than Venereal,	13		3		—		16	
TOTAL,		58		13		1		72	
Total number of attendances at Out-patient Department,		954		300		15		430	
Number of doses of Salvarsan substitutes,		315		100		15		436	

Age of persons treated.		SYPHILIS		GONORRHOEA		MIXED INFECTIONS.		TOTAL.	
		M.	F.	M.	F.	M.	F.	M.	F.
(a)	Under 1 year,	—	—	—	—	—	—	—	—
(b)	1 and under 5 years,	—	—	—	—	—	—	—	—
(c)	5, " 15, "	—	—	—	—	—	—	—	—
(d)	15, " 25, "	—	1	14	3	—	—	14	4
(e)	25 years and upwards,	11	11	13	3	—	—	24	14
TOTALS,		11	12	27	6	—	—	38	18
In 1927,		17	9	25	4	1	—	43	13

FACTORIES AND WORKSHOPS.

Many inspections were made during the year of the Factories and Workshops, including the Bakehouses, and some improvements effected. In 8 cases attention was directed to want of cleanliness, and to inefficient or defective sanitary accommodation and these were remedied.

Speaking generally, it must be said that the management of the Factories and Workshops is conducted in a manner whereby the interests of the workers in matters relating to their general health are well looked after, and I feel sure that Perth will compare favourably with any city in the kingdom.

There are three underground bakehouses in the Burgh; and in accordance with the Factory and Workshops Act of 1901 these were granted Certificates by the Local Authority, the requirements of the Act being fulfilled in all respects.

As certifying Factory Surgeon, I examined for fitness for employment in factory or workshop, a total of 195 young persons, or 26 less than the previous year. Of these 43 were males, and 178 were females. This shows as compared with the previous year a decrease of males employed of 15, and of females 11. The figures for 1927 were 43 males and 178 females. All must have attained the age of 14 before being allowed to work.

I am glad to report that only 2 cases were rejected as unfit for work, being the same number as in the previous year, one on account of uncleanness, and one on account of mental deficiency. Cases of head lousiness have been, in recent years, very much reduced, the result largely of bobbing of the hair, and to a higher appreciation by parents of the elementary laws of health. Poverty, bad housing, bad sanitation, it can safely be said, render cleanliness a condition more difficult to obtain, yet they certainly are not a bar, and one comes across many cases of vermin infection where they do not exist.

All such cases are subject to re-examination before being allowed to work. Some parents think the penalty of their children not being allowed to work too severe for the crime, but a little reflection shows how unfair it would be to the other employees. Moreover the cure is easy.

1. INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Including Inspections made by Sanitary Inspector.

Premises. (1)	Number of	
	Inspections. (2)	Written Notices. (3)
Factories (including Factory Laundries) -	14	—
Workshops (including Workshop Laundries)	134	12
Workplaces (other than Outworkers' premises)	2	—
TOTAL - -	150	12

2. DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars. (1)	Number of Defects.	
	Found. (2)	Remedied. (3)
<i>Nuisances under the Public Health Acts—</i>		
Want of Cleanliness - - - -	9	9
Other Nuisances - - - -	1	1
Sanitary Accommodation—		
Insufficient - - - -	2	2
Unsuitable or Defective - - -	—	—
TOTAL - -	12	12

WATER SUPPLY.

Perth, in addition to supplying water to its own inhabitants, also provides water for the district of Scone.

The number of reservoirs is five, one at Wellshill (430,000 gallons), Viewlands (830,000), Muirhall (1,800,000), and two at Burghmuir (each 2,000,000). The total capacity of these reservoirs is 7,060,000 gallons, and this, with a daily supply (for trade and domestic purposes) of about 2,200,000 gallons, indicates a storage of little over three days' supply.

The total quantity of water pumped in 1928 was 861,745,150 gallons, being an increase of 30,945,550 gallons, as compared with the previous year. Of this 2,213,900 gallons were used for cleansing new mains and the new reservoir.

The water supply by meter was 194,719,000 gallons, as compared with 206,767,000 in 1927. This shows a decrease of 12,048,000 gallons. In addition, 36,000,000 gallons are supplied by agreement.

In other words a total of over 628,812,250 gallons of water have been used for domestic purposes. This implies a daily supply of over 1,718,000 gallons, and, based on a population of 35,000, gives a daily supply per head of 49 gallons.

The progress of the work since my last Report may be briefly stated as follows :—

The pumping main has now been finished, and the new reservoir completed. It has a capacity of twelve and a half million gallons. The aqueduct has been laid above the Perth Bridge to near the sedimentation chamber at the Pen and Ink, the foundations of which are at present being made. Alterations are also being effected

at the Water House Works, a new boiler and auxiliary engine being in process of installation, while on November 27th, 1928, the chloride of lime apparatus for sterilising the water was superseded by an up-to-date chlorinating apparatus using pure chlorine. This apparatus, which was supplied by the Paterson Engineering Co., is capable of administering the chlorine with precision, and in quantity varying from 2·4 to 48 lbs. per day.

The control apparatus is in duplicate, each apparatus having a capacity of 24 lbs. of chlorine per day. Thus, in the case of a breakdown of one controller the other can immediately be brought into action, and no interruption of the sterilization of the water takes place.

The amount of chlorine required varies with the condition of the river, the usual quantity required being about 12 lbs. per day.

A laboratory has been set up at the Water House, where the amount of chlorine required is determined by test made at intervals throughout the day. During the past year the "chlorine required" has varied from 0·4 to 0·8 parts per million.

In the coming summer it is hoped to effect the laying of the water pipe from the filter bed across the river.

During the year several analyses of the water were made, and these are summarised in the following table:—

SUMMARY OF ANALYSES OF RIVER TAY WATER.

63

Date.	29/5/28.		13/11/28.		18/12/28.	
	Longauseway		Water House.	Burghmuir Reservoir.	Burghmuir Reservoir.	Beechwood Cot., Burghmuir Rd.
Before Chlorination	No. of Micro-organisms per 1 c.c.		20 at 20° c.			
	No. of Bacilli Coli per 1 c.c.		1 at 37° c.			
			17 in 25 c.c.			
After Chlorination	No. of Micro-organisms per 1 c.c.		1 at 20° c.	3 at 20° c.	280 at 20° c.	48 at 20° c.
			8	2.5 at 37° c.	5.5 at 37° c.	4 at 37° c.
	No. of Bacilli Coli per 1 c.c.		1 in 1 c.c.	Absent in 25 c.c.	Absent in 25 c.c.	Absent in 25 c.c.

VACCINATION (SCOTLAND) ACT, 1907.

Return of Statutory Declarations of Conscientious Objection delivered to the Registrar.

It will be noted from the table given below how, for a period of years, advantage was taken of the Conscientious Objection to vaccination, reaching a maximum in 1917 with a percentage of 34·8 unvaccinated. From that date the percentage gradually declined until 1920 to 21·2, but from that time to 1924 steadily increased. The last five years show an improvement, but I would like to see this percentage reduced to the figure of 1907, as I fear the greater the accumulation of unvaccinated children, the greater will be the epidemic should Smallpox get a foothold in the city.

Year.	No. of Births.	No. of Unvaccinated.	Percentage of Unvaccinated.
1907	802	3	·3
1908	794	57	7·1
1909	805	92	11·4
1910	786	148	18·8
1911	760	163	21·4
1912	791	184	23·2
1913	711	209	29·3
1914	727	194	26·6
1915	644	213	33·0
1916	685	229	33·4
1917	516	180	34·8
1918	477	119	25·0
1919	614	144	23·4
1920	844	180	21·2
1921	646	145	22·4
1922	691	164	23·7
1923	704	174	24·7
1924	597	155	25·9
1925	562	124	22·1
1926	661	153	23·1
1927	602	123	20·4
1928	617	123	19·9
Total	15036	3276	21·7

SLAUGHTER-HOUSE.

The Slaughter House was visited by me on one or two occasions during the year in order to ascertain the general sanitary conditions, and it can be reported that the premises were kept in satisfactory order. The gut-house, to which I have in previous Reports drawn attention, is in my opinion far from ideal, and an improvement in space, lighting and ventilation, would be beneficial to the workers concerned.

The number of animals slaughtered in 1928 was—

Cattle,	3975,	of which 48 were wholly unfit and 23 partially.
Sheep,	17,630,	„ 50 „ „ 2 „
Pigs,	2647,	„ 2 „ „ 1 „
Calves,	96,	„ 4 „ „ — „

The weight of the condemned material was—Beef, 26,202 lbs. ; Mutton, 2,527 lbs. ; Pork, 294 lbs. ; Veal, 329 lbs.

During the year Mr. Brown, V.S., who was appointed for the purposes of Section 43 of the Public Health (Scotland) Act, 1897, was called by the Superintendent on several occasions. The following table gives a summary of the diseases and number of animals, either partially or wholly unfit for food.

	Ox.	Cow.	Sheep.	Pig.	Calf.
Tuberculosis ...	10	32	—	4	1
Septic Conditions ...	1	5	4	—	—
Decomposition ...	3	5	31	—	1
Emaciation ...	—	2	2	1	—
Bruising ...	4	4	15	—	1
Uremia ...	1	—	2	—	—
Dropsy ...	1	4	10	—	—
Other Conditions ...	3	1	5	—	2
Total ...	23	53	69	5	5

Nothing has as yet been done as regards alterations and improvements of the Gut House, referred to in my annual Report of last year, because the question as to a general repair of the whole Slaughter House arose. Following this, the desirability of a new Slaughter House was discussed, and the matter is still under consideration. It is understood that if the latter is not agreed to the improvements of the Gut House will be carried out.

